VOL. 126 JANUARY 1976 NO. 1

DIAGNOSTIC RADIOLOGY

Introduction of Caldwell Lecturer, 1975. *Harold G. Jacobson, M.D.* 3
Iatrogenic Lesions of the Skeleton: Caldwell Lecture, 1975. *Ronald O. Murray, M.B.E., M.D.* 5
Idiopathic Multicentric Osteolysis. *Terry Tyler, M.D., and H. D. Rosenbaum, M.D.* 23
Myositis Ossificans Circumscripta: A Benign Lesion with a Malignant Differential Diagnosis. *Amy Beth Goldman, M.D.* 32
Lesions Resembling Gout in Patients with Rheumatoid Arthritis. *Arnold S. Rappoport, M.B., J. Leland Sosman, M.D., and Barbara N. Weissman, M.D.* 41
Bronchopulmonary Foregut Malformations: A Unifying Etiological Concept. *Kenneth B. Heithoff, M.D., Shashikant M. Sane, M.D., Hugh J. Williams, M.D., Charles J. Jarvis, M.D., John Carter, M.D., Peter Kane, M.D., and William Brennom, M.D.* 46
Neuroepithelial (Colloid) Cysts: Pathogenesis and Unusual Features. *Enrique Palacios, M.D., Behrooz Azar-Kia, M.D., Michael Shannon, M.D., and Albert V. Messina, M.D.* 56
Optimal Tomographic Technique to Demonstrate Common Bile Duct Stones: an *In Vitro* Study. *Gerald R. Smith, M.D., John W. Loop, M.D., and T. Noel K. Allan, M.B.B.S.* 63
Successful Intravenous Cholecystocholangiography in the Jaundiced Patient Using Meglumine Iodoxamate (Cholovue). *Alan H. Robbins, M.D., Sinnadurai Earampamoorthy, M.D., Raymond S. Koff, M.D., Louis T. Di Fazio, Ph.D., Elizabeth A. Wickis, and Arthur N. Gertler, M.D.* 70
Griffiths' Point: Critical Anastomosis at the Splenic Flexure: Significance in Ischemia of the Colon. *Morton A. Meyers, M.D.* 77
Angiography and Ultrasonography: A Comparative Study of Abdominal Aortic Aneurysms. *William E. Wheeler, M.D., Michael C. Beachley, M.D., and Klaus Ranniger, M.D.* 95
Coarctation of the Aorta: Roentgenographic Assessment after Operative Correction. *Arthur B. Simon, M.D., and Harvey L. Neiman, M.D.* 101

RADIATION ONCOLOGY

External and Interstitial Radiation Therapy of Carcinoma of the Oral Tongue: A Review of 32 Years' Experience. *Karen K. Fu, M.D., J. Warner Ray, M.D., Eric K. Chan, R. T., and Theodore L. Phillips, M.D.* 107
Comparison of Split-Course Radiation Therapy and Continuous Radiation Therapy for Unresectable Bronchogenic Carcinoma: 5 Year Results. *Robert E. Lee, M.D., David T. Carr, M.D., and Donald S. Childs, Jr., M.D.* 116
Mediastinal Hodgkin's Disease. *Jerome M. Vaeth, M.D., Steven A. Moskowitz, M.D., and Jerold P. Green, M.D.* 123
Elective Irradiation with the Electron Beam after Mastectomy for Breast Cancer. *Norah DuV. Tapley, M.D., and Eleanor D. Montague, M.D.* 127
Treatment Selection in Primary Breast Cancer: Pathologic Considerations. *H. Stephen Gallager, M.D.* 135
Treatment, Results and Prognostic Factors in Stage I and II Sarcomas of the Corpus Uteri. *Vitune Vongtama, M.D., John R. Karlen, M.D., Steven M. Piver, M.D., Yoshiaki Tsukada, M.D., and Robert H. Moore, M.S.* 139
Irradiation of Endometrial Cancer in Patients with Medical Contraindication to Surgery or with Unresectable Lesions. *Robert C. Landgren, M.D., Gilbert H. Fletcher, M.D., Luis Delclos, M.D., and J. Taylor Wharton, M.D.* 148
Experience with Twice-a-Day Fractionation in Clinical Radiotherapy. *Leonard J. Shukovsky, M.D., Gilbert H. Fletcher, M.D., Eleanor D. Montague, M.D., and H. Rodney Withers, M.D.* 155
Volume and Time Factors in Interstitial Gamma-Ray Therapy. *H. T. Barkley, Jr., M.D., and G. H. Fletcher, M.D.* 163
Low Energy Radionuclides for Permanent Interstitial Implantation. *B. S. Hilaris, M.D., J. H. Kim, M.D., and N. Tokita, M.D.* 171

NUCLEAR MEDICINE

Gallium-67 Scans in Children with Solid Tumors. *Philip B. Lepanto, M.D., Jeffrey Rosenstock, M.D., Philip Littman, M.D., Abass Alavi, M.D., Milton Donaldson, M.D., and David E. Kuhl, M.D.* 179

Officers 187
Editorial:
Changing of the Guard 188
News Items 190
Book Review 192
Books Received 192
Society Proceedings 193
Abstracts of Radiologic Literature 200

VOL. 126 FEBRUARY 1976 NO. 2

RADIATION ONCOLOGY

Ovarian Cancer: Multifacet Disease; Multifarious Therapy and Therapists; Janeway Lecture, 1975. *George C. Lewis, Jr., M.D.* . . . 205
Combination of Conservative Surgery and Irradiation for Cancer of the Breast. *Gilbert H. Fletcher, M.D., Eleanor Montague, M.D., and Alvah J. Nelson, III, M.D.* . . . 216
Squamous Cell Carcinoma of the Oral Tongue and Floor of Mouth: Evaluation of Interstitial Radium Therapy. *Luis Delclos, M.D., Robert D. Lindberg, M.D., and Gilbert H. Fletcher, M.D.* . . . 223
Combined Radiation Therapy and 5-Fluorouracil for Advanced Squamous Cell Carcinoma of the Oral Cavity and Oropharynx: a Randomized Study. *Theodore C. M. Lo, M.D., Albert L. Wiley, Jr., M.D., Ph.D., Fred J. Ansfield, M.D., James H. Brandenburg, M.D., Hugh L. Davis, Jr., M.D., Frank F. Gollin, M.D., Robert O. Johnson, M.D., Guillermo Ramirez, M.D., and Halvor Vermund, M.D., Ph.D.* . . . 229
Carcinoma of the Oropharynx: Results of Megavoltage Radiation Therapy in 305 Patients. *Stephen A. Weller, M.D., Don R. Goffinet, M.D., Richard L. Goode, M.D., and Malcolm A. Bagshaw, M.D.* . . . 236
Non-Randomized Comparison of Preoperative Irradiation and Surgery *versus* Irradiation Alone in the Management of Carcinoma of the Tonsil. *Carlos A. Perez, M.D., Fransiska A. Lee, M.D., Lauren V. Ackerman, M.D., Joseph H. Ogura, M.D., and William E. Powers, M.D.* . . . 248
Initial Comparative Response to Peak Pions and X-Rays of Normal Skin and Underlying Tissue Surrounding Superficial Metastatic Nodules. *Morton M. Kligerman, M.D., G. West, M.D., John F. Dicello, Ph.D., C. J. Sternhagen, M.D., J. E. Barnes, Ph.D., R. Kenneth Loeffler, M.D., Frances Dobrowolski, H. T. Davis, Ph.D., James N. Bradbury, Ph.D., Thomas F. Lane, Donald F. Petersen, Ph.D., and Edward A. Knapp, Ph.D.* . . . 261
Initial Evaluation of Reduced Fractionation in the Irradiation of Malignant Epithelial Tumors. *Maurice Greenberg, M.D., Donald R. Eisert, M.D., and James D. Cox, M.D.* . . . 268
Patterns of Failure in Intracranial Astrocytomas after Irradiation: Analysis of Dose and Field Factors. *Omar M. Salazar, M.D., Philip Rubin, M.D., Joseph V. McDonald, M.D., and Michael L. Feldstein, Ph.D.* . . . 279
Pharmaco-Kinetics of Current Skeletal-Seeking Radiopharmaceuticals. *G. T. Krishnamurthy, M.B.B.S., R. J. Huebotter, B.A., M. Tubis, Ph.D., and W. H. Blahd, M.D.* . . . 293
Cancer of the Undescended or Maldescended Testis. *Mostafa A. Batata, M.D., Willet F. Whitmore, Jr., M.D., Basil S. Hilaris, M.D., Nobuhiko Tokita, M.D., and Harry Grabstald, M.D.* . . . 302
Effect of Therapeutic Irradiation on the Immune Responses. *James M. Slater, M.D., Ernest Ngo, M.D., and Benjamin H. S. Lau, Ph.D.* . . . 313

DIAGNOSTIC RADIOLOGY

The Spectrum of Osteoblastoma. *Richard A. McLeod, M.D., David C. Dahlin, M.D., and John W. Beabout, M.D.* . . . 321
Non-Rheumatic Acute Mitral Insufficiency Caused by Ruptured Chordae Tendineae. *Edward Buonocore, M.D., James J. Acker, M.D., and Hu A. Blake, M.D.* . . . 336
Hemochromatosis: A Disease Often Silent But Not Invisible. *Pamela S. Jensen, M.D.* . . . 343
Biliary Ascariasis in Children. *B. J. Cremin, F.R.A.C.R., and R. M. Fisher, M.B.* . . . 352
Intestinal Malrotation in Adults: Roentgenographic Assessment with Emphasis on Isolated Complete and Partial Nonrotations. *Emil J. Balthazar, M.D.* . . . 358
Arteriography of Retroperitoneal Lymphoma. *David C. Levin, M.D., David H. Gordon, M.D., Mahesh Kinkhabwala, M.D., and Joshua A. Becker, M.D.* . . . 368
Roentgenology-Pathology Correlative Study of Neovascularity. *Stephen L. Gammill, M.D., Frederick H. Shipkey, M.D., Elliot H. Himmelfarb, M.D., Louis S. Parvey, M.D., and Jack G. Rabinowitz, M.D.* . . . 376
Complications of Percutaneous Transuxillary Catheterization for Arteriography and Selective Chemotherapy. *Ruza Antonovic, M.D., Josef Rösch, M.D., and Charles T. Dotter, M.D.* . . . 386
Analysis of Cecal Vasculature in the Search for Vascular Malformations. *Jeanne W. Baer, M.D., and Stephen Ryan, M.D.* . . . 394
Computerized Reconstructive Tomography Applied to Breast Pathology. *David F. Reese, M.D., J. Aidan Carney, M.B., John J. Gisvold, M.D., Philip R. Karsell, M.D., and Stephen A. Kollins, M.D.* . . . 406
Efficacy of Pneumogynecography in the Diagnosis of Meyer-Rokitansky-Küster-Hauser Syndrome. *Spas A. Spasov, M.D., Stoyan I. Dokumov, M.D., Lubomir A. Diankov, M.D., Ivo M. Balkov, M.D., and Anton M. Sarkanyatz, M.D.* . . . 413
Retrocecal Appendicitis Presenting with Air in the Subhepatic Space. *Roger K. Harned, M.D.* . . . 416
Pulmonary Metastases from Intracerebral Meningioma: Diagnosis by Percutaneous Needle Aspiration Biopsy. *Anthony G. Peck, M.D., Carolyn G. Dedrick, M.D., and Priscilla D. Taft, M.D.* . . . 419
Hazards of the Intensive Care Unit. *Carl E. Ravin, M.D., Charles E. Putman, M.D., and Theresa C. McLoud, M.D.* . . . 423
A Device to Measure Roentgenographic Structures. *Gilles Hudon, M.D., Richard Moore, Ph.D., Sung Kim, M.S., and Kurt Amplatz, M.D.* . . . 432

Officers . . . 438
Editorial
The James Picker Foundation for Radiologic Research. MMF . . . 439
In Memoriam
Fernando G. Bloedorn, M.D., 1913–1975. *Gilbert H. Fletcher, M.D.* . . . 441
Charles Hanson Peterson, M.D., 1904–1975. *James G. Snead, M.D., John A. Martin, M.D., and Charles D. Smith, M.D.* . . . 444
Fifty-eighth Annual Meeting of the American Radium Society. *Felix N. Rutledge, M.D.* . . . 446
Fifty-eighth Annual Meeting of the American Radium Society: Preliminary Program . . . 447
News Items . . . 450
Books Received . . . 455
Society Proceedings . . . 456
Abstracts of Radiologic Literature . . . 463

VOL. 126 MARCH 1976 NO. 3

RADIATION ONCOLOGY

The Role of the Clinician in Community Cancer Control Activities. *Victor A. Marcial* 471
Radiation Therapy for Testicular Tumors Metastasizing to the Lungs. *Theodore C. M. Lo, M.D., and Yung H. Son, M.D.* 475
Radiation Therapy in the Treatment of Glioblastoma. *Yasuto Onoyama, M.D., Mitsuyuki Abe, M.D., Eizo Yabumoto, M.D., Tsutomu Sakamoto, M.D., Takehiro Nishidai, B.Sc., and Sumio Suyama, B.Sc.* 481
Growth Analysis of Pulmonary Metastases from Salivary Gland Tumors. *Frank G. Twardzik, M.D., and David M. Sklaroff, M.D., F.A.C.R.* 493
Concepts for Treatment of Micrometastases Developed in Murine Systems. *Frank M. Schabel, Jr., Ph.D.* 500

DIAGNOSTIC RADIOLOGY

Optimal Visualization of Esophageal Varices. *Edward M. Cockerill, M.D., Roscoe E. Miller, M.D., Stanley M. Chernish, M.D., Gordon C. McLaughlin, III, M.D., and Bruce E. Rodda, Ph.D.* 512
Involvement of the Gastric Antrum in Ménétrier's Disease. *Major William W. Olmsted, USAF, MC, Major Philip H. Cooper, MC, USA, and Major John E. Madewell, MC, USA* 524
Normal Pancreas and Splenic Variants Simulating Suprarenal and Renal Tumors. *A. K. Raja Rao, M.D., and Terry M. Silver, M.D.* 530
Fat Thickness in the Neonatal Small Left Colon Syndrome. *Lawrence R. Kuhns, M.D., Paul E. Berger, M.D., Andrew K. Poznanski, M.D., and John F. Holt, M.D.* 538
Rhabdomyosarcoma in the Pediatric Age Group. *Ned B. Hornback, M.D., and Homayoon Shidnia, M.D.* 542
Postadrenalectomy Pituitary Adenoma (Nelson's Syndrome) in Childhood: Clinical and Roentgenologic Detection. *Lionel W. Young, M.D., Gerald H. K. Lim, M.B., B.S., Gilbert B. Forbes, M.D., and Michael F. Bryson, M.D.* 550
Changing Clinical and Roentgenographic Patterns of Necrotizing Enterocolitis. *Jack G. Rabinowitz, M.D., and Robert L. Siegle, M.D.* 560
Arteriographic Manifestations of Pheochromocytoma. *Richard Christenson, M.D., Clyde W. Smith, M.D., and Henry Burko, M.D.* 567
Embolic Occlusion of the Superior and Inferior Divisions of the Middle Cerebral Artery with Angiographic-Clinical Correlation. *L. Reed Altemus, M.D., Glenn H. Roberson, M.D., C. Miller Fisher, M.D., and Michael Pessin, M.D.* 576
Cerebral Blood Volume Alterations During Fractional Pneumoencephalography. *Karsten Voigt and Torgny Greitz* 582
Frontal Ventricular Dimensions on Normal Computed Tomography. *Francis J. Y. Hahn, M.D., and Kwan Rim, Ph.D.* 593
Bronchography in Patients with Hemoptysis. *John V. Forrest, M.D., Stuart S. Sagel, M.D., and Gary H. Omell, M.D.* 597
Isolated Rotatory Subluxation of the Carpal Navicular. *Terry M. Hudson, M.D., William J. Caragol, M.D., and Jeremy J. Kaye, M.D.* 601
The Notched Articular Process of C7 (Dorsalization of C7). *Kenneth R. Kattan, M.D.* 612
Spinal Neurofibromatosis. *Norman E. Leeds, M.D., and Harold G. Jacobson, M.D.* 617

ULTRASOUND

Demonstration and Dimensional Analysis of the Normal Pancreas with Gray-Scale Echography. *Kai Haber, M.D., Atis K. Freimanis, M.D., and W. Michael Asher, M.D.* 624

CASE REPORTS

Intra- and Extracerebral Arachnoid Cyst: An Atypical Roentgenographic Presentation. *Richard E. Latchaw, Major, USAF, MC, and Joseph Nadell, Major, USAF, MC* 629
Radiation-Induced Renovascular Hypertension. *Gerald E. Staab, M.D., Charles J. Tegtmeyer, M.D., and William C. Constable, M.B., Ch.B., D.M.R.T.* 634
Postesophageal Narrowing Associated with Barrett Esophagus. *Alan E. Oestreich, M.D.* 638
Multichambered Bladder Anomalies. *Alexander A. Cacciarelli, M.D., Bruce Lucas, M.D., and William H. McAlister, M.D.* 642
Localized Nodular Synovitis of the Knee: A Report of Two Cases with Abnormal Arthrograms. *Thomas G. Goergen, M.D., Donald Resnick, M.D., and Gen Niwayama, M.D.* 647

Officers 651
Editorial:
Guidelines for the Modern Cardiac Catheterization-Angiocardiographic Laboratory: Report of the Inter-Society Commission for Heart Disease Resources. *Herbert L. Abrams* 652
News Items 654
Book Review 656
Books Received 656
Society Proceedings 658
Abstracts of Radiologic Literature 665

VOL. 126 APRIL 1976 NO. 4

DIAGNOSTIC RADIOLOGY

Virus Diseases of Bone. Do They Exist? The Neuhauser Lecture. *Frederic N. Silverman, M.D.* 677
Loss of Colonic Haustration in Progressive Systemic Sclerosis. *William Martel, M.D., Stanley F. Chang, M.D., and Murray R. Abell, M.D.* 704
Roentgen Findings in Aorto-Enteric Fistulae. *George M. Wyatt, M.D., Michael I. Rauchway, M.D., and Harold B. Spitz, M.D.* 714
Multiple Benign Ureteral Fibrous Polyps. *Felix A. Hughes, III, M.D., and Charles S. Davis, Jr., M.D.* 723
Cavitating Lung Nodules and Pneumothorax in Children with Metastatic Wilms' Tumor. *E. George Kassner, M.D., Harold S. Goldman, M.D., and Alberto Elguezabal, M.D.* 728
The Spotted Nephrogram of Renal Scleroderma. *Jeffrey Winograd, M.D., Daniel H. Schimmel, M.D., and Alphonse J. Palubinskas, M.D.* 734
The Role of Emergency Excretory Urography in Evaluation of Blunt, Abdominal Trauma. *Eugene J. McDonald, Jr., M.D., Melvyn Korobkin, M.D., Richard P. Jacobs, M.D., and Hideyo Minagi, M.D.* 739
Arthrography in Total Hip Prosthesis Complications. *Martin I. Gelman, M.D.* 743
The Grooves of the Distal Articular Surface of the Femur—A Normal Variant. *R. Brent Harrison, M.D., Mary Beth Wood, M.D., and Theodore E. Keats, M.D.* 751
Chiba Percutaneous Transhepatic Cholangiography: A Valuable Method for Visualizing the Nondilated Biliary Tract. *Joseph Tabrisky, M.D., Robbe L. Lindstrom, M.D., Laurence G. Hanelin, M.D., and William F. Pfisterer, M.D.* 755
Organizing a Community Department for Academic Radiology. *D. William Sherrick, M.D., P. F. Mahon, M.D., David B. Lewis, M.D., and Erwin M. Janzen, M.D.* 761
Computerized Tomography (CT) in Acute Head Trauma. *Jorge Merino-deVillasante, M.D., and Juan M. Taveras, M.D.* 765
Individualized Computer Tomography of the Skull with the EMI Scanner Using the 160×160 Matrix. *Steven H. Cornell, M.D., Jacob J. Musallam, M.D., Ching L. Chiu, M.D., and James H. Christie, M.D.* 779
Computed Tomography of the Normal and Infarcted Myocardium. *Douglass F. Adams, Samuel J. Hessel, Philip F. Judy, Jay A. Stein, and Herbert L. Abrams* 786
The Value of Repeat Cerebral Arteriography in the Evaluation of Trauma. *Eugene J. McDonald, Jr., M.D., David P. Winestock, M.D., and Julian T. Hoff, M.D.* 792
Caudal Dislocation of the Pons in the Adult Arnold-Chiari Malformation: An Angiographic Evaluation. *Meredith Weinstein, M.D., and Thomas H. Newton, M.D.* 798
Angiographic Manifestations of Bilateral Wilms' Tumor. *Barry T. Katzen, M.D., and Melvin Markowitz, M.D.* 802
The Abdominal Angiographic Spectrum of Tuberous Sclerosis. *William R. Compton, M.D., Patrick D. Lester, M.D., Myo M. Kyaw, M.D., and Jack A. Madsen, M.D.* 807
The Complication Rate of Catheter Angiography by Direct Puncture Through Aorto-Femoral Bypass Grafts. *Ronald L. Eisenberg, M.D., Richard L. Mani, M.D., and Eugene J. McDonald, Jr., M.D.* 814
Systemic Arterial Supply to Normal Basilar Segments of the Left Lower Lobe. *Donald R. Kirks, M.D., Peter E. Kane, M.D., Edward A. Free, M.D., and Hooshang Taybi, M.D.* 817
Iatrogenic Embolization of the Superior Mesenteric Artery: Arteriographic Observations and Clinical Implications. *Adam Lande, M.D., and Morton A. Meyers, M.D.* 822
Partial Mesenteric Arterial Occlusion with Subsequent Ischemic Bowel Damage Due to Pitressin Infusion. *Cameron Roberts, M.D., and Frank E. Maddison, M.D.* 829

NUCLEAR MEDICINE

Radionuclide Imaging in Skeletal Inflammatory and Ischemic Disease in Children. *Massoud Majd, M.D., and Robert S. Frankel, M.D.* 832
"Doughnut" Sign in Brain Scanning. *Yavuz A. Tarcan, M.D., William Fajman, M.D., Joseph Marc, M.D., and David Berg, D.O.* 842

ULTRASONOGRAPHY

Ultrasonic Evaluation of the Unilateral Nonvisualized Kidney. *John P. Marangola, M.D., Patrick J. Bryan, F.R.C.R., and Farhad Azimi, M.D.* 853

RADIATION ONCOLOGY

Factors that Modify the Radio-Response of Cancer of the Nasopharynx. *Joseph Bahorquez, M.D.* 863
Definitive Treatment of Carcinoma of the Rectum by Intracavitary Radiation Therapy. *Gwynn Jelden, M.D., Ranjit Dhaliwal, M.D., Antonio Rodriguez-Antunez, M.D., Edward Chernak, B.S., R. Turnbull, M.D., Victor Fazio, M.D., and Frank Weakley, M.D.* 877
Serial Studies of Immunocompetence in Head and Neck Cancer Patients Undergoing Radiation Therapy. *Stefano Stefani, M.D., Ronald Kerman, Ph.D., and Joseph Abbate, M.D.* 880
Hemangiopericytoma: Report of Three Cases Regarding Role of Radiation Therapy. *Harbans Lal, M.D., B. Sanyal, M.D., G. C. Pant, M.D., B. L. Rastogi, M.D., N. N. Khanna, M.S., and K. N. Udupa, M.S.* 887

CASE REPORTS

Congenital Absence of the Ductus Venosus: With Direct Connection Between the Umbilical Vein and the Distal Inferior Vena Cava. *John C. Leonidas, M.D., and Richard A. Fellows, M.D.* 892
Aneurysmal Bone Cyst of the Orbit with Unusual Angiographic Features. *A. M. O'Gorman, M.B., and T. H. Kirkham, F.R.C.S.* 896
Vertebral Sarcoidosis: A Case Report and Review of the Literature. *Philip A. Brodey, M.D., Stephen Pripstein, M.D., Gerald Strange, M.D., and Nevea D. Kohout, M.D.* 900
Extra-Abdominal Desmoid of the Axillary Tail Mimicking Breast Carcinoma. *Lester Kalisher, M.D., John A. Long, M.D., and Robert G. Peyster, M.D.* 903

Officers 907
Editorial:
Is Nuclear Medicine in Trouble? John G. McAfee 908
News Items 910
Book Reviews 913
Books Received 915
Society Proceedings 917
Abstracts of Radiologic Literature 924

Vol. 126 May 1976 No. 5

DIAGNOSTIC RADIOLOGY

Cannon Lecture: Islet Cell Tumors and the Alimentary Tract. *R. M. Zollinger* 933

Angiography in Crohn's Disease Revisited. *F. Brahme and J. Hildell* 941

Hepatic Angiography in Ulcerative Colitis and Crohn's Disease. *L. Ekelund, A. Lunderquist, H. Dencker, and M. Åkerman* 952

Megacystis-Microcolon–Intestinal Hypoperistalsis Syndrome: A New Cause of Intestinal Obstruction in the Newborn. Report of Radiologic Findings in Five Newborn Girls. *W. E. Berdon, D. H. Baker, W. A. Blanc, B. Gay, T. V. Santulli, and C. Donovan* 957

Multiple "Bull's-eye" Lesions in Gastric Lymphoma. *N. R. Dunnick, G. S. Harell, and B. R. Parker* 965

Vascular Impressions of the Gut Secondary to Chronic Vascular Occlusive Disease. *L. Menuck and M. Coel* 970

A New Concept of Ascitic Fluid Distribution. *A. V. Proto, E. J. Lane, and J. P. Marangola* 974

Glucagon and Barium Enema Examinations: A Controlled Clinical Trial. *R. K. Harned, C. B. Stelling, S. Williams, and G. L. Wolf* 981

Spontaneous Internal Drainage of Pancreatic Pseudocysts. *J. L. Clements, Jr., E. L. Bradley, III, and S. B. Eaton, Jr.* 985

Lumbar Epidural Venography in the Diagnosis of Disc Herniations. *R. Gershater and R. C. Holgate* 992

Transfemoral Lumbar Epidural Venography. *M. H. Miller, S. F. Handel, and J. D. Coan* 1003

Epidural Venography: Diagnosis of Herniated Lumbar Intervertebral Disc and Other Disease of the Epidural Space. *G. F. Drasin, R. H. Daffner, R. F. Sexton, and W. C. Cheatham* 1010

The Cardiac Pacemaker: A Different Twist. *C. J. Tegtmeyer and J. M. Deignan* 1017

Iliocaval Thrombi in Pulmonary Thromboembolic Disease. *J. C. Rudikoff, P. R. Clapp, and E. J. Ferris* 1019

Venography in Penetrating Injuries of the Extremities. *A. J. Gerlock, Jr., E. R. Thal, and W. H. Snyder, III* 1023

Selective Arterial Embolization for Control of Hemorrhage in Pelvic Malignancy: Femoral and Brachial Catheter Approaches. *F. J. Miller, Jr., R. Mortel, W. J. Mann, and A. E. Jahshan* 1028

Peripheral Embolization Complicating Bilateral Renal Infarction with Gelfoam. *J. Woodside, H. Schwarz, and P. Bergreen* 1033

Crossed Renal Ectopia: Angiographic Findings in Six Cases. *Z. J. Rubinstein, M. Hertz, N. Shahin, and V. Deutsch* 1035

Angiographically Induced Renal Failure and Its Radiographic Detection. *R. A. Older, J. P. Miller, D. C. Jackson, I. S. Johnsrude, and W. M. Thompson* 1039

Arthrographic Evaluation of Injuries of the First Metacarpophalangeal Joint: Gamekeeper's Thumb. *D. Resnick and L. A. Danzig* 1046

Isolated Fracture of the Medial Portion of the Lateral Mass of the Atlas: A Previously Undescribed Entity. *E. G. Barker, Jr., J. Krumpelman, and J. M. Long* 1053

Concomitant Dislocation and Intraarticular Foreign Body: A Rare Complication of the Charnley Total Hip Arthroplasty. *R. E. Campbell and J. P. Marvel, Jr.* 1059

Embryogenesis of the Human Occipital Bone. *R. Shapiro and F. Robinson* 1063

Film Screening by Physician Assistants in Diagnostic Radiology. *E. G. Barker, Jr., H. D. Rosenbaum, A. C. Selke, Jr., D. Henderson, and J. H. Hildner* 1069

NUCLEAR MEDICINE

^{99m}Tc-Diphosphonate Uptake in Neuroblastoma. *W. McCartney, M. L. Nusynowitz, B. E. F. Reimann, J. Prather, and B. Mazat* 1077

RADIATION ONCOLOGY

Adjuvant Chemoimmunotherapy in Advanced Lesions of the Head and Neck. *F. R. Eilber and D. L. Morton* 1082

Immunotherapy of Malignancies: Current Status. *F. R. Eilber, E. C. Holmes, D. L. Morton, K. P. Ramming, and F. C. Sparks* 1088

Editorial: CT and the Planners. *T. F. Meaney* 1095

News Items 1098

Society Proceedings 1100

Abstracts of Radiologic Literature 1107

Vol. 126 June 1976 No. 6

DIAGNOSTIC RADIOLOGY

Hickey Lecture: New Frontier for Radiology: Computed Tomography. *R. G. Evens* 1117
Breast Patterns as an Index of Risk for Developing Breast Cancer. *J. N. Wolfe* 1130
Radiographic Visualization of Left Ventricular Aneurysms on Lateral Chest Film. *R. D. Kittredge, B. Gamboa, and H. G. Kemp* 1140
The Chest X-ray in Acute Left Ventricular Power Failure: An Aid to Determining Prognosis of Patients Supported by Intraaortic Balloon Pumping. *P. N. Cascade, A. Kantrowitz, W. J. Wajszczuk, and M. Rubenfire* 1147
Abnormal Left Ventricular Catheter Motion: An Ancillary Angiographic Sign of Left Atrial Myxoma. *J. M. Rausch, R. T. Reinke, K. L. Peterson, and C. B. Higgins* 1155
Evaluation of Routine Double Contrast Views of the Anterior Wall of the Stomach. *M. R. Goldsmith, R. E. Paul, Jr., W. E. Poplack, J. P. Moore, H. Matsue, and S. Bloom* 1159
Intussusception of the Appendix in Children. *G. O. Atkinson, B. B. Gay, Jr., and D. Naffis* 1164
Plain Film Findings of Gastric Volvulus Herniating into the Chest. *L. Menuck* 1169
Chondrosarcoma of the Esophagus. *I. Yaghmai and G. G. Ghahremani* 1175
Localized Giant Pseudopolyposis in Ulcerative Colitis. *J. W. Keating, Jr., and H. J. Mindell* 1178
Clinical and Radiographic "Reankylosis" Following Hip Surgery in Ankylosing Spondylitis. *D. Resnick, I. L. Dwosh, T. G. Goergen, R. F. Shapiro and R. D'Ambrosia* 1181
Medial Deviation of the Upper Pole Calyx on the Intravenous Urogram as an Indication of Vesicoureteral Reflux. *R. B. Harrison, S. S. Howards, and B. R. Thomas* 1189
Ultrasound Diagnosis of Posttransplant Renal Lymphocele. *J. F. Phillips, H. L. Neiman, and T. L. Brown* 1194
Pseudotumor of the Kidney: A Sequel to Regional Glomerulonephritis. *T. A. Depner, K. G. Ryan, and H. Yamauchi* 1197
Tortuosity of the Cavernous Carotid Arteries Causing Sellar Expansion Simulating Pituitary Adenoma. *R. D. Anderson* 1203
Serial Cerebral Angiography in Stereoscopic Magnification. *M. Takahashi, Y. Tamakawa, K. Goto, and M. Kosaka* 1211
Radiologic Changes in the Thymoma-Hypogammaglobulinemia Syndrome. *R. E. Moffat* 1219
Cerebro-Costo-Mandibular Syndrome: Long Term Follow-up of a Patient and Review of the Literature. *H. J. Williams and S. M. Sane* 1223
Intestinal Perforation Secondary to Nasojejunal Feeding Tubes. *R. L. Siegle, J. G. Rabinowitz, and C. Sarasohn* 1229
Lesion Conspicuity, Structured Noise, and Film Reader Error. *H. L. Kundel and G. Revesz* 1233
A Circular Test Pattern for Evaluating X-ray Tube Focal Spots. *G. H. Zeman, G. U. V. Rao, and R. J. Doyle* 1239

NUCLEAR MEDICINE

Lack of Gallium Uptake in Primary Hepatic Amyloidosis. *T. G. Goergen, A. Taylor, and N. Alazraki* 1246
Incidentally Detected Thrombosed Vein during ^{67}Ga Citrate Scanning. *C. H. Park, F. J. Miller, A. Lipton, and H. Harvey* 1249

RADIATION ONCOLOGY

Electron Beam Therapy in Head and Neck Tumors. *D. A. Tobin, W. Hall, and R. M. Scott* 1251
Surgical Treatment of Advanced Carcinoma of the Floor of the Mouth. *O. M. Guillamondegui and R. H. Jesse* 1256
Central Axis Depth Dose for a 2.5 MV Van de Graaff Generator. *D. W. Anderson, D. E. Raeside, R. I. Adams, and M. R. Goede* 1260

SPECIAL SECTION: International Bone Mineralization Conference Abstracts 1266

Editorial: Bone Mineral Measurement. *J. P. Whalen* 1315
77th ARRS Meeting Announcement and Preliminary Program 1316
Memorial: Paul A. Bishop 1325
News 1327
Literature Abstracts 1331
Volume Index 1339

SUBJECT INDEX TO VOLUME 126

(E) = editorial (B) = book review (M) = memorial

Academic radiology, organizing a community department, 761
American Radium Society
  58th annual meeting, 446
  meeting agenda, 447
American Roentgen Ray Society
  meeting announcement, 1316
  preliminary program, 1317
Angiography and ultrasonography, comparative study of abdominal aortic aneurysms, 95
Aorta, coarctation of, roentgenographic assessment after operative correction, 101
Aorto-enteric fistulae, roentgen findings, 714
Appendicitis, retrocecal, presenting with air in the subhepatic space, 416
Atrial myxoma, catheter motion in, 1155
Arachnoid cyst, intra- and extracerebral, 629
Arterial occlusion due to Pitressin infusion, 829
Ascariasis, biliary, in children, 352
Ascitic fluid distribution, 974
Atlas, isolated fracture of medial portion of, 1053

Barrett esophagus, postesophageal narrowing, 638
Bile duct stones, tomographic technique, 63
Bladder anomalies, multichambered, 642
Bloedorn, Fernando (M), 441
Bone mineral measurement, (E), 1315
Bone mineralization conference, abstracts of, 1266
Books reviewed
  Atlas of Hand Radiographs, 913
  Atlas of Tumor Radiology, 192
  Diagnostic Uses of Ultrasound, 656
  Radiologic and Other Biophysical Methods in Tumor Diagnosis, 915
  Technology and Interpretation, 914
  Thoracic and Cardiovascular, 192
Breast cancer
  surgery and irradiation, 216
  treatment selection in primary, 135
Breast carcinoma, extra-abdominal desmoid of the axillary tail mimicking, 903
Breast pathology, computerized tomography in, 406
Breast patterns as an index of risk, 1130
Bronchopulmonary foregut malformations, a unifying etiological concept, 46

Cardiac pacemaker, 1017
Carotid tortuosity causing sellar expansion, 1203
Carpal navicular, isolated rotatory subluxation of, 601
Catheter angiography, complication rate, 814
Cavitating lung nodules and pneumothorax in children with metastatic Wilms' tumor, 728
Cecal vasculature in vascular malformations, 394
Cerebral angiography, serial, in stereoscopic magnification, 1211
Cerebral artery, embolic occlusion, 576
Cerebral blood volume in fractional pneumoencephalography, 582
Cerebro-costo-mandibular syndrome, 1223
Changing of the guard (E), 188
Charnley hip arthroplasty, complications, 1061
Chiba percutaneous transhepatic cholangiography, 755
Cholecystocholangiography in the jaundiced patient, 70
Chondrosarcoma of esophagus, 1175
Colitis, pseudopolyposis in ulcerative, 1178
Colonic haustration loss in progressive systemic sclerosis, 704
Community cancer control activities, role of clinician, 471
Computed tomography, new frontier for radiology, 1117
Crohn's disease, angiography, 941
Crossed renal ectopia, angiographic findings, 1035
C7, notched articular process, 612
CT and the planners (E), 1095

Disc herniations, lumbar epidural venography in diagnosis of, 992
"Doughnut" sign in brain scanning, 842
Ductus venosus, congenital absence, 892

Endometrial cancer, irradiation of, 148
Epidural venography, diagnosis of herniated lumbar intervertebral disc, 1010
Epithelial tumors, malignant, reduced fractionation, 268
Esophageal varices, optimal visualization, 512

Femur, grooves of distal articular surface, 751
Film screening by physician assistants, 1069
Fractionation, experience with twice-a-day, in clinical radiotherapy, 155
Frontal ventricular dimensions on normal computed tomography, 593

Gallium-67 scans in children with solid tumors, 179
Gastric lymphoma, "bull's eye" lesions in, 965
Gastric volvulus herniating into chest, 1169
Glioblastoma, radiation therapy treatment, 481
Glucagon and barium enema examinations, 981
Griffiths' point, critical anastomosis at the splenic flexure, 77
Guidelines for the modern cardiac catheterization–angiocardiographic laboratory (E), 652

Head and neck cancer patients, immunocompetence, 880
Head and neck tumors, electron beam therapy, 1251
Head and neck lesions, adjuvant chemoimmunotherapy, 1082
Head trauma, computerized tomography in, 765
Hemangiopercytoma, radiation therapy, 887
Hemochromatosis, silent but not invisible, 343
Hemoptysis, bronchography in patients with, 597
Hepatic amyloidosis, lack of gallium uptake, 1246
Hip prosthesis complications, arthrography, 743
Hodgkin's disease, mediastinal, 123

Immune responses, effect of therapeutic irradiation on, 313
Intensive care unit, hazards, 423
Interstitium
  gamma-ray therapy, volume, time factors, 163
  implantation, low energy radionuclides for, 171
Intestine
  malrotation in adults, assessment with emphasis on complete and partial nonrotations, 358
  perforation from feeding tubes, 1229
Intraaortic balloon pumping, chest x-ray in acute left ventricular power failure, 1147

Intracranial astrocytomas, failure patterns, 279
Intussusception of appendix in children, 1164
Islet cell tumors and the alimentary tract, 933

Kidney
ultrasonic evaluation of unilateral nonvisualized, 853
pseudotumor of, following glomerulonephritis, 1197
Knee, localized nodular synovitis, 649

Lesion conspicuity, structured noise, film reader error, 1233
Lobe, systemic arterial supply to left lower, 817
Lumbar epidural venography, 1003
Lymphoma, arteriography of retroperitoneal, 368

Malignancies, immunotherapy, 1088
Megacystis-microcolon-intestinal hypoperistalsis syndrome, 957
Mastectomy, elective irradiation with electron beam, 127
Measuring device for roentgenographic structures, 432
Menetrier's disease, involvement of gastric antrum, 524
Micrometastases, treatment concept in murine systems, 500
Mitral insufficiency, non-rheumatic acute, 336
Meyer-Rokitansky-Kuster-Hauser syndrome, pneumogynecography in diagnosis, 413
Mouth carcinoma, surgical treatment, 1256
Myocardium, computed tomography of normal and infarcted, 786
Myositis ossificans circumscripta, 32

Nasopharynx cancer, factors modifying radioresponse, 863
Nelson's syndrome in childhood, 550
Neonatal small left colon syndrome, fat thickness, 538
Neovascularity, roentgenology-pathology, 376
Neuroblastoma, Tc-diphosphonate uptake, 1077
Neuroepithelial (colloid) cysts, 56
Nuclear medicine, is it in trouble? (E), 908

Occipital bone, embryogenesis of human, 1063
Oral tongue, carcinoma, radiation therapy, 107
Orbit, aneurysmal bone cyst of, 896
Oropharynx, carcinoma, 236
Osteoblastoma, spectrum of, 321
Osteolysis, iodiopathic multicentric, 23
Ovarian cancer, multifarious therapy and therapists, 205

Pancreas, gray-scale echography, 624
Pancreas simulating suprarenal and renal tumors, 530
Pancreatic pseudocysts, spontaneous internal drainage, 985
Pelvic hemorrhage, embolic control, 1028
Percutaneous transaxillary catheterization, 386
Peterson, Charles Hanson (M), 444
Pheochromocytoma, arteriographic manifestations, 567
Pons, caudal dislocation, in adult Arnold-Chiari malformation, 798
Pulmonary metastases from intracerebral meningioma, 419
Pulmonary thromboembolic disease, iliocaval thrombi in, 1019

Radiation therapy bronchogenic carcinoma, 116
Radiologic research, James Picker foundation (E), 439
Radionuclide detection of thrombosed vein, 1249
Radiopharmaceuticals, pharmaco-kinetics of current skeletal-seeking, 293
Reankylosis after hip surgery, 1181
Rectum carcinoma, definitive treatment by intracavitary radiation therapy, 877
Renal failure, angiographically induced, 1039
Renal infarction, peripheral embolization, 1033
Renal lymphocele, ultrasound diagnosis, 1194
Renovascular hypertension, radiation-induced, 634
Rhabdomyosarcoma in pediatric age group, 542
Rheumatoid arthritis, lesions resembling gout, 41

Salivary gland tumors, growth analysis of pulmonary metastases, 493
Scleroderma, spotted nephrogram of renal, 734
Skeletal inflammatory and ischemic disease in children, radionuclide imaging, 832
Skeleton, iatrogenic lesions, 5
Skin response to pions and x-rays, 261
Skull, computed tomography, 779
Spinal neurofibromatosis, 617
Squamous cell carcinoma
oral cavity, radiation and 5-fluorouracil therapy, 229
oral tongue and floor of mouth, evaluation of interstitial radium therapy, 223
Stomach, double contrast views, 1159
Superior mesenteric artery, iatrogenic embolization, 822

Test pattern for evaluating x-ray tube focal spots, 1239
Testicular tumors metastasizing to the lungs, radiation therapy, 475
Testis, cancer of undescended or maldescended, 302
Thumb, arthrography, 1047
Thymoma-hypogammaglobulinemia syndrome, 1219
Tonsil carcinoma, management of, 248
Trauma, value of repeat cerebral arteriography, 792
Tuberous sclerosis, abdominal angiographic spectrum, 807

Ulcerative colitis and Crohn's disease, hepatic angiography, 952
Upper pole calyx, medial deviation, 1189
Ureteral fibrous polyps, multiple benign, 723
Urography, emergency excretory, in abdominal trauma, 739
Uterine sarcomas, treatment results and prognostic factors in stage I and II, 139

Van de Graaff generator, central axis depth dose, 1260
Vascular impressions of gut, 970
Venography in injuries of extremities, 1023
Ventricular aneurysms, left, on lateral chest film, 1140
Vertebral sarcoidosis, 900
Virus diseases of bone: do they exist? 677

Wilms' tumor, angiographic manifestation of bilateral, 802

AUTHOR INDEX TO VOLUME 126

Abbate J, 880
Abe M, 481
Abell MR, 704
Abrams HL, 652, 786
Acker JJ, 336
Ackerman LV, 248
Adams DF, 786
Adams RI, 1260
Akerman M, 952
Alavi A, 179
Alazraki N, 1246
Allan TNK, 63
Altemus LR, 567
Amplatz K, 432
Anderson DW, 1260
Anderson RD, 1203
Ansfield FJ, 229
Antonovic R, 386
Asher WM, 624
Atkinson GO, 1164
Azar-kia B, 56
Azimi F, 853

Baer JW, 394
Bagshaw MA, 236
Baker DH, 957
Balkov IM, 413
Balthazar EJ, 358
Barker, EG Jr, 1053, 1069
Barkley HT Jr, 163
Barnes JE, 261
Batata MA, 302
Beabout JW, 321
Beachley MC, 95
Becker JA, 368
Berdon WE, 957
Berg D, 842
Berger PE, 538
Bergreen P, 1033
Blahd WH, 293
Blake HA, 336
Blanc WA, 957
Bloom S, 1159
Bohorquez J, 863
Bradbury JN, 261
Brandenburg JH, 229
Bradley EL III, 985
Brahme F, 941
Brennon W, 46
Brodey PA, 900
Brown TL, 1194
Bryan PJ, 853
Bryson MF, 550
Buonocore E, 336
Burko H, 567

Cacciarelli AA, 642
Campbell RE, 1059
Caragol WJ, 601
Carney JA, 406
Carr DT, 116
Carter J, 46
Cascade PN, 1147
Chan EK, 107
Chang SF, 704
Cheatham WC, 1010
Chernak E, 877
Chernish SM, 512
Childs DS Jr, 116
Chiu CL, 779
Christenson R, 567
Christie JH, 779
Clapp PP, 1019
Clements JL Jr, 985
Coan JD, 1003
Cockerill EM, 512
Coël M, 970
Compton WR, 807
Constable WC, 634
Cooley CW, 914
Cooper PH, 524
Cornell SH, 779
Cox JD, 268
Cremin BJ, 352

Daffner RH, 1010
Dahlin DC, 321
D'Ambrosia R, 1181
Danzig LA, 1046
Davis CS Jr, 723
Davis HL, 229
Davis HT, 261
Dedrick CG, 419
Deignan JM, 1017
Delclos L, 148, 223
Dencker H, 952
Depner TA, 1197
Deutsch V, 1035
Dhaliwal R, 877
Diankov LA, 413
Dicello JF, 261
Di Fazio LT, 70
Dobrowolski F, 261
Dokumov SI, 413
Donaldson M, 179
Donovan C, 957
Dotter CT, 386
Doyle RJ, 1239
Drasin GF, 1010
Dunnick NR, 965
Dwosh IL, 1181

Earampamoorthy S, 70
Eaton SB Jr, 985
Eilber FR, 1082, 1088
Eisenberg RL, 814
Eisert DR, 268
Ekelund L, 952
Elguezabal A, 728
Evens RG, 1117

Fajman W, 842
Fazio V, 877
Feldstein ML, 279
Fellows RA, 892
Ferris EJ, 1019
Figley MM, 188, 339
Fisher CM, 576
Fisher RM, 352
Fletcher GH, 148, 155, 163, 216, 223, 441
Forbes GB, 550
Forrest JV, 597
Frankel RS, 832
Free EA, 817
Freimanis AK, 624
Fu KK, 107

Gallager HS, 135
Gamboa B, 1140
Gammill SL, 376
Gay B, 957
Gay BB Jr, 1164
Gelman MI, 743
Gerlock AM Jr, 1023
Gershater R, 992
Gertler AN, 70
Ghahremani GG, 1175
Gisvold JJ, 406
Goede MR, 1260
Goergen TG, 647, 1181, 1246
Goffinet DR, 236
Goldman AB, 32
Goldman HS, 728
Goldsmith MR, 1159
Gollin FF, 229
Goode RL, 236
Gordon DH, 368
Goto K, 1211
Grabstald H, 302
Green JP, 123
Greenberg M, 268
Greitz T, 582
Guillamondegui OM, 1256

Haber K, 624
Hahn FJY, 593
Hall W, 1251
Handel SF, 1003
Hanelin LG, 755
Harell GS, 965
Harned RK, 416, 981
Harrison RB, 751, 1189
Harvey H, 1249
Heithoff KB, 46
Henderson D, 1069
Henderson MD, 915
Hertz M, 1035
Hessel SJ, 786
Higgins CB, 1155
Hilaris BS, 171, 302
Hildell J, 941
Hildner JH, 1069
Himmelfarb EH, 376
Hoff JT, 792
Holgate RC, 992
Holmes EC, 1088
Holt JF, 538
Hornback NB, 542
Howards SS, 1189
Hudon G, 432
Hudson TM, 601
Huebotter RJ, 293
Hughes FA, 723

Jackson DC, 1039
Jacobs RP, 739
Jacobson HG, 617
Jahshan AE, 1028
Janzen EM, 761
Jarvis CJ, 46
Jelden G, 877
Jensen PS, 343
Jesse RH, 1256
Johnson RO, 229
Johnsrude IS, 1039
Judy PF, 786

Kalisher L, 903
Kane P, 46
Kane PE, 817
Kantrowitz A, 1147
Karlen JR, 139
Karsell PR, 406
Kassner EG, 728
Kattan KR, 612
Katzen BT, 802
Kay JJ, 601
Keating JW Jr, 1178
Keats TE, 751
Kemp HG, 1140
Kerman R, 880
Khanna NN, 887
Kim JH, 171
Kim S, 432
Kinkhabwala M, 368
Kirkham TH, 896
Kirks DR, 817
Kittredge RD, 1140
Kligerman MM, 261
Knapp EA, 261
Koff RS, 70
Kohout ND, 900
Kollins SA, 406
Korobkin M, 739
Kosaka M, 1211
Krishnamurthy GT, 293
Krumpelman J, 1053
Kuhl DE, 179
Kuhns LR, 538
Kundel HL, 1233
Kyaw MM, 807

Lal H, 887
Lande A, 822
Landgren RC, 148
Lane EJ, 974
Lane TF, 261
Lang EF, 192
Latchaw RE, 629
Lau BHS, 313
Lee FA, 248
Lee RE, 116
Leeds NE, 617
Leonidas JC, 892
Lepanto PB, 179

Lester PD, 807
Levin DC, 368
Lewis DB, 761
Lewis GC, 205
Lim GHK, 550
Lindberg RD, 223
Lindstrom RL, 755
Lipton A, 1249
Littman P, 179
Lo TCM, 229, 475
Loeffler RK, 261
Long JA, 903
Long JM, 1053
Loop JW, 63
Lucas B, 642
Lunderquist A, 952

Madewell JE, 524
Madsen JA, 807
Mahon PF, 761
Majd M, 832
Mani RL, 814
Mann WJ, 1028
Marangola JP, 853, 974
Marc J, 842
Marcial VA, 471
Markowitz M, 802
Martel W, 704
Martin JA, 444
Marvel JP Jr, 1059
Matsue H, 1159
Mazess RB, 1266
McAfee JG, 908
McAlister WH, 642
McCartney W, 1077
McDonald EJ Jr, 739, 792, 814
McDonald JV, 279
McLaughlin GC III, 512
McLeod RA, 321
McLoud TC, 423
Meaney TF, 1095
Menuck L, 970, 1169
Merino-deVillansante J, 765
Messina AV, 56
Meyers MA, 77, 822
Miller FJ Jr, 1028, 1249
Miller JP, 1039
Miller MH, 1003
Miller RE, 512
Minagi H, 739
Mindell JH, 1178
Moffatt RE, 1219
Montague ED, 127, 155, 216
Moore JP, 1159
Moore R, 432
Moore RH, 139
Mortel R, 1028
Morton DL, 1082, 1088
Moskowitz SA, 123
Murray RO, 5

Musallam JJ, 779

Nadell J, 629
Naffis D, 1164
Nazat B, 1077
Neiman HL, 101, 1194
Nelson AJ, 216
Newton TH, 798
Ngo E, 313
Nishidai T, 481
Niwayama G, 647
Nusynowitz ML, 1077

Oestreich AE, 638
O'Gorman AM, 896
Ogura JH, 248
Older RA, 1039
Olmsted WW, 524
Omell GH, 597
Onoyama Y, 481

Palacios E, 56
Palubinskas AJ, 734
Pant GC, 887
Park CH, 1249
Parker BR, 965
Parvey LS, 376
Paul RE Jr, 1159
Peck AG, 419
Perez CA, 248
Pessin M, 576
Petersen DF, 261
Peterson KL, 1155
Peyster RG, 903
Pfisterer WF, 755
Phillips JF, 1194
Phillips TL, 107
Piver SM, 139
Poplack WE, 1159
Poznanski AK, 538
Powers WE, 248
Prather J, 1077
Pripstein S, 900
Proto AV, 974
Putman CE, 423

Rabinowitz JF, 376, 1229
Raeside DE, 1260
Ramirez G, 229
Ramming KP, 1088
Ranniger K, 95
Rao AKR, 530
Rao GUV, 1239
Rappoport A, 41
Rastogi BL, 887
Rauchway M, 714
Rausch JM, 1155
Ravin CE, 423
Ray JW, 107
Reese DF, 406
Reimann BEF, 1077

Reinke RT, 1155
Resnick D, 647, 1046, 1181
Revesz G, 1233
Rim K, 593
Roberson GH, 576
Robbins AH, 70
Robinson F, 1063
Rodda BE, 512
Rodriguez-Antunez A, 877
Rösch J, 386
Rosenbaum HD, 1069
Rosenstock J, 179
Rubenfire M, 1147
Rubin P, 279
Rubinstein ZJ, 1035
Rudikoff JC, 1019
Ryan KG, 1197
Ryan S, 394

Sagel SS, 597
Sakamoto T, 481
Salazar OM, 279
Sane SM, 46, 1223
Santulli TV, 957
Sanyal B, 887
Sarasohn C, 1229
Sarkanyatz AM, 413
Schabel FM Jr, 500
Schimmel DH, 734
Schwarz H, 1033
Scott RM, 1251
Selke AC Jr, 1069
Sexton RF, 1010
Shahin N, 1035
Shannon M, 56
Shapiro R, 1063
Shapiro RF, 1181
Sherrick DW, 761
Shidnia H, 542
Shipkey FH, 376
Shukovsky LJ, 155
Siegle RL, 1229
Silver TM, 530
Silverman FN, 677
Simon AB, 101
Sklaroff DM, 493
Slater JM, 313
Smith CD, 444
Smith CW, 567
Smith GR, 63
Snead JA, 444
Snyder WH III, 1023
Son YH, 475
Sosman JL, 41
Sparks FC, 1088
Spitz HB, 714
Spasov SA, 413
Staab GE, 634
Stefani S, 880
Stein JA, 786
Stelling CB, 981

Sternhagen CJ, 261
Strange G, 900

Tabrisky J, 755
Taft PD, 419
Takahashi M, 1211
Tamakawa Y, 1211
Talpey ND, 127
Tarcan YA, 842
Taveras JM, 765
Taybi H, 817
Taylor A, 1246
Tegtmeyer CJ, 634, 1017
Thal ER, 1023
Thomas BR, 1189
Thompson WM, 1039
Tobin DA, 1251
Tokita N, 171, 302
Troupin RH, 188
Tsukada Y, 139
Tubis M, 293
Turnbull R, 877
Twardzik FG, 493
Tyler T, 23

Udupa KN, 887

Vaeth JM, 123
Vermund H, 229
Voigt K, 582
Vongtama V, 139

Wajszczuk WJ, 1147
Weakley F, 877
Weinstein M, 798
Weissman BN, 41
Weller SA, 236
West G, 261
Whalen JP, 1315
Wharton JT, 148
Wheeler WE, 95
Whitmore WF Jr, 302
Wickis EA, 70
Wiley AL Jr, 229
Williams HJ, 46, 1223
Williams S, 981
Winestock DP, 792
Winograd J, 734
Withers HR, 157
Wolfe GL, 981
Wolfe JN, 1130
Wood, MB, 751
Woodside J, 1033
Wyatt GM, 714

Yabumoto E, 481
Yaghmai I, 1175
Yamauchi H, 1197
Young LW, 550

Zeman GH, 1239
Zingas AP, 656
Zollinger RM, 933

Volume 127

AMERICAN JOURNAL OF ROENTGENOLOGY

EDITOR MELVIN M. FIGLEY

ASSISTANT EDITOR ROSALIND H. TROUPIN

ASSOCIATE EDITORS LUTHER W. BRADY
KENNETH L. KRABBENHOFT
E. FREDERICK LANG
RUSSELL H. MORGAN

EDITOR EMERITUS TRAIAN LEUCUTIA

INCLUDING DIAGNOSTIC RADIOLOGY, RADIATION ONCOLOGY, NUCLEAR MEDICINE, ULTRASONOGRAPHY AND RELATED BASIC SCIENCES

CONSULTING EDITORIAL BOARD

KENT ELLIS
E. ROBERT HEITZMAN
DONALD L. KING
JOHN A. KIRKPATRICK, JR.
EUGENE C. KLATTE
JOHN G. McAFEE
THOMAS H. NEWTON
ROBERT G. PARKER
STEWART R. REUTER
WILLIAM B. SEAMAN
ROBERT J. SHALEK
JOHN STORER
MICHEL M. TER-POGOSSIAN
JOSEPH P. WHALEN
DAVID M. WITTEN

EDITORIAL STAFF: C. P. KAISER, M. J. LEONARD, K. A. MURRAY, M. B. WIECKOWICZ

OFFICIAL JOURNAL

AMERICAN ROENTGEN RAY SOCIETY

AMERICAN RADIUM SOCIETY

The American Journal of Roentgenology is issued monthly by Charles C Thomas, Publisher, 301–327 East Lawrence Ave., Springfield, Illinois 62717. Correspondence regarding subscriptions, advertisements and other business should be addressed to the Publisher. Annual subscription prices: United States and U. S. Possessions $40.00, Pan America, Canada and others $50.00. Single copies, $5.00. Printed by the George Banta Co., Menasha, Wisconsin.

Copyright © 1976 by American Roentgen Ray Society.
Second-class postage paid at Springfield, Illinois and at additional mailing offices. Printed in U.S.A.

AMERICAN ROENTGEN RAY SOCIETY

OFFICERS 1975–76

President: Ted F. Leigh.
President Elect: Seymour F. Ochsner.
1st Vice President: Edward B. Singleton.
2nd Vice President: Sidney W. Nelson.
Secretary: James F. Martin.
Treasurer: Joseph D. Calhoun.
Honorary President: C. L. Sherratt.

COMMITTEES 1975–76

Executive Council: T. F. Leigh, S. F. Ochsner, E. B. Singleton, J. F. Martin, J. D. Calhoun, M. W. Figley, T. Leucutia, H. C. Carlson, R. C. Pfister, R. A. Gagliardi, M. P. Capp, E. Gedgaudas, G. A. Kling, C. B. Holman, W. B. Seaman, E. C. Klatte, J. P. Tampas, J. L. Gwinn, C. E. Bickham, H. L. Friedell, Chairman.
Finance and Budget Committee: J. J. Stein, C. E. Bickham, R. McLelland, J. L. Gwinn, H. C. Carlson, Chairman.
Publication Committee: E. R. Heitzman, J. V. Rogers, K. Ellis, F. F. Ruzicka, Jr., R. A. Gagliardi, Chairman.
Editorial Policy Committee: M. M. Figley, E. F. Lang, L. W. Brady, K. L. Krabbenhoft, R. H. Morgan, E. R. Heitzman, J. V. Rogers, K. Ellis, F. F. Ruzicka, R. A. Gagliardi, Chairman.
Program Committee: T. F. Leigh, J. F. Martin, H. L. Friedell, M. M. Figley, R. A. Gagliardi, R. C. Pfister, E. Gedgaudas, G. A. Kling, M. P. Capp, S. F. Ochsner, Chairman.
Advisory Committee on Education and Research: G. W. Hartman, L. F. Rogers, E. Gedgaudas, A. E. James, M. P. Capp, Chairman.
Scientific Exhibits Committee: B. G. Brogdon, R. J. Alfidi, R. C. Pfister, Chairman.
Instruction Courses: Director, E. Gedgaudas, Associate Director, H. O. Peterson.
Representatives on the American Board of Radiology: R. W. McConnell, J. F. Roach, S. W. Nelson.
Representative on the Board of Chancellors and Council of the American College of Radiology: W. B. Seaman.

ANNUAL MEETING: September 20–24, 1976, Washington, D. C., Washington Hilton Hotel.

SCIENTIFIC PROGRAM: Seymour Ochsner, *President Elect*, Ochsner Clinic, New Orleans, La.

MANAGER ANNUAL MEETING: George A. Kling, Harper Hospital, Detroit, Mich.

Membership: Hymer Friedell, Chairman, Executive Council,
Case Western Reserve University, Cleveland, Ohio 44106.

BUSINESS OFFICE: Keith W. Gundlach, Comptroller, American College of Radiology,
20 North Wacker Drive, Chicago, Illinois 60606.

AMERICAN RADIUM SOCIETY

OFFICERS: 1976–77

President: Luther W. Brady
President Elect: Richard H. Jesse
1st Vice President: Morton M. Kligerman
2d Vice President: George C. Lewis, Jr.
Secretary: Alfred S. Ketcham
Treasurer: Fred W. George

COMMITTEES: 1976–1977

Executive Committee: F. Rutledge, L. W. Brady, R. H. Jesse, F. W. George, M. M. Kligerman, G. C. Lewis, A. S. Ketcham, V. Marcial, J. Vaeth, Chairman.
Public Relations Committee: C. Honaker, L. W. Brady, Chairman.
Publication Committee: K. L. Krabbenhoft, A. F. Schroeder, G. Seydel, L. W. Brady, Chairman.
Scientific Program Committee: S. H. Levitt, M. Kligerman, S. Hellman, A. S. Ketcham, R. H. Jesse, H. B. Kerman, R. Young, T. Phillips, E. Strong, G. C. Lewis, L. W. Brady, Chairman.
Janeway Lecture Committee: A. S. Ketcham, S. H. Levitt, L. W. Brady, Chairman.
Local Arrangements Committee: M. Boone, J. Helsper, C. Eskey, S. Ochsner, R. H. Jesse, L. W. Brady, N. duV. Tapley, S. H. Levitt, Chairman.
Representatives on the American Board of Radiology: J. J. Stein, E. R. King, N. duV. Tapley.
Representative on the Board of Chancellors of the American College of Radiology: L. W. Brady.
Liason Representative on the National Council on Radiation Protection and Measurements: L. W. Davis.

ANNUAL MEETING: April 24–28, 1977, Las Vegas, Nevada, MGM Grand Hotel

SCIENTIFIC PROGRAM: L. W. Brady, *President*, Philadelphia, Pennsylvania

LOCAL ARRANGEMENTS: S. H. Levitt, Minneapolis, Minnesota

MEMBERSHIP: A. S. Ketcham, *Secretary*, Division of Oncology, University of Miami School of Medicine, P.O. Box 520875 Biscayne Annex, Miami, Florida 33152.

BUSINESS OFFICE: N. V. Jordan, c/o R. H. Jesse, M. D. Anderson Hospital and Tumor Institute,
6723 Bertner Avenue, Houston, Texas 77030.

Vol. 127 July 1976 No. 1

The Challenge of Computed Tomography. *M. M. Ter-Pogossian* 1
Picture Quality of Computed Tomography. *G. N. Hounsfield* 3
The Effects of Biological Motion on CT Resolution. *R. J. Alfidi, W. J. MacIntyre, and J. R. Haaga* 11
Picture Processing in Computed Tomography. *M. Bergström and R. Sundman* 17
Computed Tomography of the Body: Initial Clinical Trial with the EMI Prototype. *P. F. Sheedy, D. H. Stephens, R. R. Hattery, J. R. Muhm, and G. W. Hartman* 23
Computed Tomography of the Body. Early Trends in Application and Accuracy of the Method. *R. J. Stanley, S. S. Sagel, and R. G. Levitt* 53
Computed Tomography of the Liver. *R. J. Alfidi, J. R. Haaga, T. R. Havrilla, R. G. Pepe, and S. A. Cook* 69
Computed Tomographic Evaluation of Aortic Aneurysms. *S. P. Axelbaum, D. Schellinger, M. N. Gomes, R. A. Ferris, and H. G. Hakkal* 75
Computed Tomography of the Heart. *M. M. Ter-Pogossian, E. S. Weiss, R. E. Coleman, and B. E. Sobel* 79
Cardiac Reconstruction Imaging in Relation to Other Ultrasound Systems and Computed Tomography. *R. Gramiak and R. C. Waag* 91
Computed Tomography and Neuroradiology: A Fortunate Primary Union. *H. L. Baker, Jr.* 101
Some Limitations of Computed Tomography in the Diagnosis of Neurological Diseases. *K. R. Davis, J. M. Taveras, G. H. Roberson and Robert H. Ackerman* 111
Trends in the Development of Reconstruction Tomography in Neuroradiology. *T. Greitz* 125
Computed Tomography in Infants and Children: Intracranial Neoplasms. *P. E. Berger, D. R. Kirks, D. L. Gilday, C. R. Fitz, and D. C. Harwood-Nash* 129
Computed Tomography: The Anatomic Basis of the Zone of Diminished Density Surrounding Meningiomas. *R. M. Sigel and A. V. Messina* 139
Computed Tomographic Evaluation of Hemorrhage Secondary to Intracranial Aneurysm. *K. R. Davis, P. F. J. New, R. G. Ojemann, R. M. Crowell, R. B. Morawetz, and G. H. Roberson* 143
Demonstration of Purulent Bacterial Intracranial Infections by Computed Tomography. *R. A. Zimmerman, S. Patel, and L. T. Bilaniuk* 155
Stereotaxic Computed Tomography. *M. Bergström and T. Greitz* 167
Computed Tomography and Radionuclide Studies in the Diagnosis of Intracranial Disease. *J. H. Christie, H. Mori, R. T. Go, S. H. Cornell, and R. L. Schapiro* 171
High Resolution Computed Tomography of the Orbit with the Ohio Nuclear Delta Head Scanner. *M. A. Weinstein, A. J. Berlin, Jr., and P. M. Duchesneau* 175
Further Progress in CT Scanning and Computerized Radiation Therapy Treatment Planning. *G. L. Jelden, E. S. Chernak, A. Rodriguez-Antunez, J. R. Haaga, P. S. Lavik, and R. S. Dhaliwal* 179
Health Planning for Computed Tomography: Perspectives and Problems. *L. E. Cloe* 187
Economic Analysis of Computed Tomography Units. *R. G. Evens and R. G. Jost* 191
Editorial: Orientation of CT Images *M. M. Figley and W. R. Eyler* 199
Abstracts of Current Literature 200
ARRS Section on Instruction 207
News 217
Radiologic Societies 219

Vol. 127 August 1976 No. 2

DIAGNOSTIC RADIOLOGY

The Value of Systemic Arterial Heparinization in Transfemoral Angiography: A Prospective Study. *R. Antonovic, J. Rösch, and C. T. Dotter* 223
Takayasu's Arteritis and Congenital Coarctation of the Descending Thoracic and Abdominal Aorta: A Critical Review. *A. Lande* 227
Aortoenteric and Paraprosthetic-Enteric Fistulas: Radiologic Findings. *W. M. Thompson, D. C. Jackson, and I. S. Johnsrude* 235
Angiography of Mediastinal Parathyroid Adenomas. *C. J. Tegtmeyer, E. M. Alrich, and T. E. Keats* 243
Systemic to Pulmonary Venous Communication in the Superior Vena Caval Syndrome. *E. S Wilson* 247
Pseudocavitary Granulomas of the Lung. *N. Bancks and J. Zornoza* 251
Percutaneous Spot Localization of Nonpalpable Breast Lesions. *J. W. Horns and R. D. Arndt* 253
Double-blind Comparison of Meglumine Iodoxamate (Cholovue) and Meglumine Iodipamide (Cholografin). *A. H. Robbins, E. N. Sargent, M. E. Vincent, W. Boswell, and H. I. Meyers* 257
Lymphoreticular Hyperplasia of the Stomach (Pseudolymphoma). *W. Martel, M. R. Abell and T. N. K. Allan* 261
Cholecystokinetic Cholecystography: Efficacy and Tolerance Study of Sincalide. *E. N. Sargent, H. I. Meyers, and J. Hubsher* 267
Colonic Changes of Herpes Zoster. *L. S. Menuck, F. Brahme, J. Amberg, and H. P. Sherr* 273
Pseudoobstruction in Ceroidosis. *M. Boller, C. Fiocchi, and C. H. Brown* 277
Anomalies of the Craniovertebral Border. *R. Shapiro and F. Robinson* 281
An Early Rim Sign in Neonatal Adrenal Hemorrhage. *P. W. Brill, I. H. Krasna, and H. Aaron* 289
Autonomic Dysreflexia in Patients with Spinal Cord Lesions: Complication of Voiding Cystourethrography and Ileal Loopography. *Z. L. Barbaric* 293
Roentgenologic Abnormalities of the Urinary Bladder Secondary to Crohn's Disease. *N. Joffe* 297
Unilateral Hematocolpos and Ipsilateral Renal Agenesis: Report of Two Cases and Review of the Literature. *I. C. Yoder and R. C. Pfister* 303

NUCLEAR MEDICINE

Gallium Scanning in Cerebral and Cranial Infections. *A. D. Waxman and J. K. Siemsen* 309

ULTRASONOGRAPHY

Pseudocyst Formation in Acute Pancreatitis: Ultrasonographic Evaluation of 99 Cases. *A. C. Gonzalez, E. L. Bradley, and J. L. Clements, Jr.* 315

RADIATION ONCOLOGY

Preoperative Radiation Therapy in Endometrial Carcinoma: Preliminary Report of a Clinical Trial. *I. J. Weigensberg* 319
The Role of Postoperative Irradiation in the Management of Stage I Adenocarcinoma of the Endometrium. *C. P. Morrow, P. J. Di Saia, and D. E. Townsend* 325
Fast Neutron Beam Radiotherapy of Glioblastoma Multiforme. *R. G. Parker, H. C. Berry, A. J. Gerdes, M. D. Soronen, and C. M. Shaw* 331
Transformation Delay of Lymphocytes in Patients Undergoing Radiation Therapy. *T. Merz, T. Hazra, M. Ross, and L. Ciborowski* 337

CASE REPORTS

Perforation of the Nasopharynx by Nasogastric Intubation: A Rare Cause of Left Pleural Effusion and Pneumomediastinum. *P. T. Siemers and R. T. Reinke* 341
Arthrographic Diagnosis of Synovial Chondromatosis. *R. J. Prager and J. C. Mall* 344
Synovial Osteochondromatosis Involving the Elbow. *P. E. Giustra, R. S. Furman, L. Roberts, and P. J. Killoran* 347
A Mobile Calcified Amputated Appendix Epiploica. *S. A. Borg, G. H. Whitehouse, and G. J. Griffiths* 349
Carcinoma of the Urachus. *S. Y. Han and D. M. Witten* 351

TECHNICAL NOTES

Spinal Needle with Depth Guide: A New Design for Simplifying Subarachnoid Injections. *V. C. Hinck* 354
Update on the Independent Radiation Monitor (IRM). *P. M. Kroening and R. Mucha* 355

Editorial: The Technologic Imperative. *R. F. Rushmer* 356
Richard Hall Chamberlain, 1915–1975 358
Abstracts of Current Literature 359
News 367
Program of the 1976 Society for Pediatric Radiology Meeting 368
Radiologic Societies 369

Vol. 127 September 1976 No. 3

DIAGNOSTIC RADIOLOGY

High Dose Urography: Incidence and Relationship to Spontaneous Peripelvic Extravasation. *M. E. Bernardino and B. L. McClennan* 373
Autonomous Hyperparathyroidism in Patients on Maintenance Home Dialysis. *C. A. Lehman and M. H. Schreiber* 377
Therapeutic Vascular Occlusion Utilizing Steel Coil Technique: Clinical Applications. *S. Wallace, C. Gianturco, J. H. Anderson, H. M. Goldstein, L. J. Davis, and R. L. Bree* 381
Embolic Control of Hypertension Caused by Segmental Renal Artery Stenosis. *S. P. Reuter, P. R. Pomeroy, V. P. Chuang, and K. J. Cho* 389
Aneurysms Secondary to Pancreatitis. *A. F. White, S. Baum, and S. Buranasiri* 393
Radiologic and Pathologic Characteristics of the WDHA Syndrome. *R. P. Gold, T. J. Black, H. Rotterdam, and W. J. Casarella* 397
Fine Needle Transhepatic Cholangiography: A New Approach to Obstructive Jaundice. *J. T. Ferrucci, Jr., J. Wittenberg, R. A. Sarno, and J. R. Dreyfuss* 403
Percutaneous Transhepatic Cholangiography with Selective Catheterization of the Common Bile Duct. *F. Burcharth and N. Nielbo* 409
Jaundice from Impacted Sediment in a T Tube: Recognition and Treatment. *D. V. Jelaso and J. S. Hirschfield* 413
The Aberrant Gallbladder: Angiographic and Radioisotopic Considerations. *V. P. Chuang* 417
Pathophysiology of Enlargement of the Small Bowel Fold. *W. W. Olmsted and D. E. Reagin* 423
Electrical Stimulation for Anal Sphincter Control in Barium Enema Examinations: An Extended Trial. *K. Clark and D. Rowan* 429
Radiographic Evaluation of Endotracheal Tube Position. *L. R. Goodman, P. A. Conrardy, F. Laing, and M. M. Singer* 433
Further Observations on Pulmonary Venous Varix. *J. Twersky, D. C. Levin, N. Twersky, and D. H. Gordon* 435
Pulmonary Metastases from Benign-appearing Smooth Muscle Tumors of the Uterus. *D. Bachman and M. Wolff* 441
Radiology of Knee Joint Replacement. *M. I. Gelman and H. K. Dunn* 447
Traumatic Lesions of the Discovertebral Junction in the Lumbar Spine. *W. Martel, J. F. Seeger, J. D. Wicks, and R. L. Washburn* 457
Congenital Dislocation of the Knee. *D. H. Carlson and J. O'Connor* 465
The Os Incae. *R. Shapiro and F. Robinson* 469
A New Radiographic Technique for Fractures of the Orbit and Maxilla. *E. L. Lame and T. J. Redick* 473
Computed Tomography and Brain Scintigraphy in Ischemic Stroke. *L. C. Chiu, L. B. Fodor, S. H. Cornell, and J. H. Christie* 481
Normal Variants and Congenital Anomalies in the Region of the Obelion. *G. Currarino* 487

RADIATION ONCOLOGY

The Destiny of Brachytherapy in Oncology. *B. Pierquin.* Translated by J. F. Wilson 495
Laparoscopy and Laparotomy in Staging Hodgkin's and Non-Hodgkin's Lymphoma. *U. Veronesi, P. Spinelli, G. Bonadonna, L. Gennari, E. Bajetta, G. Beretta, and G. Tancini* 501
Subtotal Mastectomy and Radiation Therapy in the Definitive Management of Localized Breast Malignancy. *P. E. Wallner, L. W. Brady, Jr., J. Loughead, T. Matsumoto, J. Antoniades, S. Prasasvinichai, J. R. Glassburn, S. O. Asbell, and J. I. Damsker* 505
Postoperative Irradiation in the Prevention of Keloids. *D. S. Levy, M. M. Salter, and R. E. Roth* 509
Parametrial Calcification in Cervical Carcinoma Patients Treated with Radioactive Gold. *T. M. Deeths and R. J. Stanley* 511

CASE REPORTS

Nodular Lymphoid Hyperplasia of the Colon Associated with Dysgammaglobulinemia. *A. A. DeSmet, D. G. Tubergen, and W. Martel* 515
Massive Enlargement of the Ileocecal Valve due to Lymphoid Hyperplasia. *A. C. Selke, Jr., J. Z. Jona, and R. P. Belin* 518
Hepatoscintigraphy, Arteriography, and Ultrasonography in Preoperative Diagnosis of Choledochal Cyst. *C. Piyachon, M. Poshyachinda, and V. Dhitavat* 520
Arachnoid Granulations Simulating Osteolytic Lesions of the Calvarium. *R. Branan and C. B. Wilson* 523
Unilateral Dysplasia of the Superior Articular Facet of the Axis. *R. Salama and S. L. Weissman* 525
Arteriographic Findings in Hyperergic Granulomatosis and Vasculitis of a Kidney. *G. P. Pouliadis, J. Wellauer, R. Streuli, A. Fontana, and J. Briner* 526

RADIATION PHYSICS

Interim Report: Mammographic Exposures at the Breast Cancer Detection Demonstration Project Screening Centers. *P. Wootton* 531
Erratum: Sheedy et al. 127:23-51, 1976 533
Editorial: Echocardiography: Territorial Imperative? *W. G. Guntheroth* 534
A. Justin Williams, 1901–1976 535
Abstracts of Current Literature 536
Book Reviews 544
News 547
Radiologic Societies 549

Vol. 127 October 1976 No. 4

DIAGNOSTIC RADIOLOGY

Healing of Deep Venous Thrombosis: Venographic Findings in a Randomized Study Comparing Streptokinase and Heparin. *J. Rösch, C. T. Dotter, A. J. Seaman, J. M. Porter, and H. H. Common* 553
Hemodynamic Assessment of Obstructive Aortoiliac Disease. *W. Castaneda-Zuniga, L. Knight, A. Formanek, R. Moore, V. D'Souza, and K. Amplatz* 559
Effects of Experimental Hepatic Artery Embolization on Hepatic Function. *K. J. Cho, S. R. Reuter, and R. Schmidt* 563
Traumatic Thenar Ischemia. *J. C. Wandtke, R. M. Spitzer, H. E. Olsson, and E. Welch* 569
Appearance of the Interventricular Septum in Obstructive Lesions of the Left Ventricular Outflow Tract. *H. A. Baltaxe, A. R. Levin, and D. R. Alonso* 573
Sacroiliitis in Severe Psoriasis. *J. N. Harvie, R. S. Lester, and A. H. Little* 579
Posttraumatic Adhesive Capsulitis of the Ankle: Arthrographic Diagnosis. *A. B. Goldman, M. C. Katz, and R. H. Freiberger* 585
The Infrapatellar Synovial Fold: A Cause for Confusion in the Evaluation of the Anterior Cruciate Ligament. *M. K. Dalinka and J. Garofola* 589
Determination of Bone Mineral Content Using CT Scanning. *N. E. Reich, F. E. Seidelmann, R. R. Tubbs, W. J. MacIntyre, T. F. Meaney, R. J. Alfidi, and R. G. Pepe* 593
Sphenoethmoidal Mucocele: Radiographic Diagnosis. *G. H. Roberson, A. K. Patterson, M. el Deeb, R. H. Maisel, and R. C. Bone* 595
The Radiology of Transsphenoidal Hypophysectomy: A Review of 100 Cases. *S. L. G. Rothman, E. L. Kier, and W. E. Allen, III* 601
Air Contrast Colon Examination in Patients with Colostomies. *H. M. Goldstein and M. H. Miller* 607
Radiographic Manifestations of Malignant Histiocytosis. *N. R. Dunnick, B. R. Parker, R. A. Warnke, and R. A. Castellino* 611
Neonatal Diaphragmatic Dysfunction. *H. A. Wexler and C. A. Poole* 617
Two Lesser Known but Useful Signs of Neonatal Pneumothorax. *L. E. Swischuk* 623
Early Diagnosis of Necrotizing Enterocolitis. *R. L. Siegle, J. G. Rabinowitz, S. B. Korones, and F. G. Eyal* 629

NUCLEAR MEDICINE

Correlation of Renal Images on Bone Scan and Intravenous Pyelogram. *D. R. Biello, R. E. Coleman, and R. J. Stanley* 633
Angiographic Documentation of Systemic-Portal Venous Shunting as a Cause of a Liver Scan "Hot Spot" in Superior Vena Caval Obstruction. *K. R. Lee, D. F. Preston, N. L. Martin, and R. G. Robinson* 637

RADIATION ONCOLOGY

Carcinoembryonic Antigen (CEA) Monitoring of Radiation Therapy for Colorectal Cancer. *P. H. Sugarbaker, W. D. Bloomer, E. D. Corbett, and J. T. Chaffey* 641
Radiation Therapy in the Management of Primary Breast Cancer. *B. Pierquin, F. Baillet, and J. F. Wilson* 645

RADIATION PHYSICS

Use of Auxiliary Collimating Devices in the Treatment for Breast Cancer with ^{60}Co Teletherapy Units. I. Dosimetric Considerations. *W. Grant, III, J. H. Cundiff, and W. F. Hanson* 649
Use of Auxiliary Collimating Devices in the Treatment for Breast Cancer with ^{60}Co Teletherapy Units. II. Dose to the Skin. *W. F. Hanson and W. Grant, III* 653
Simplified Method for Standardization of Roentgenographic Image Quality Using Penetration Quality Measurements. *P.-J. P. Lin and L. F. Rogers* 659

CASE REPORTS

Computed Tomography in Progressive Multifocal Leukoencephalopathy. *J. P. Conomy, M. A. Weinstein, D. Agamanolis, and W. S. Holt* 663
Extensive Central Nervous System Calcification in a Stillborn Male Infant due to Cytomegalovirus Infection. *J. R. Marquis and J. K. Lee* 665
Bilateral Subclavian Steal Syndrome. *F. Arevalo and B. T. Katzen* 668
Scrotal "Arteriocele" from Iliac Artery Occlusion. *R. M. Conroy and R. L. VanderMolen* 670
Vasopressin Control of Massive Hemorrhage in Chronic Ulcerative Colitis. *J. A. Cavaluzzi, S. L. Kaufman, and R. I. White, Jr.* 672
Postgastrectomy Distortion of the Pancreatic Ducts Simulating Carcinoma. *J. L. Meakins and L. A. Stein* 675
Intraluminal Duodenal Diverticulum Associated with Trisomy 21. *J. Sampliner, S. A. Kollins, and R. E. Hermann* 677
Displaced Lateral Surface of the Liver (Hellmer's Sign) Secondary to an Extraperitoneal Fluid Collection. *D. Wixson, E. Kazam, and J. P. Whalen* 679
Genitourinary Involvement in Chronic Granulomatous Disease of Childhood. *G. S. Forbes, G. W. Hartman, E. C. Burke, and J. W. Segura* 683
Metaphyseal Chondroblastoma of Bone. *R. S. Aronsohn, W. R. Hart, and W. Martel* 686
Acupuncture Needles: A "New" Foreign Body in the Ear. *C. J. Schatz and S. Fordham* 688

Erratum: Sheedy et al., 127:23–51, 1976 691
Editorial: "If You Are Pregnant, or If You Think You Might Be. . . ." *A. Bruwer* 696
Klaus Ranniger, 1926–1976 699
Abstracts of Current Literature 700
Book Reviews 710
News 711

Vol. 127 November 1976 No. 5

DIAGNOSTIC RADIOLOGY

Compensatory Renal Enlargement in Older Patients. *L. Ekelund and J. Göthlin* 713
The Angiographic Appearance of Benign Renal Oxyphilic Adenoma. *T. A. Sos, G. F. Gray, Jr., and H. A. Baltaxe* 717
Asymmetry of the Pelvic Ureters in Normal Females. *H. A. Kabakian, H. K. Armenian, Z. L. Deeb, and G. K. Rizk* 723
The Radiologic Manifestations of Idiopathic Intestinal Pseudoobstruction. *M. D. Schuffler, C. A. Rohrmann, Jr., and F. E. Templeton* 729
Radiographic Evaluation of Complications after Jejunoileal Bypass Surgery. *A. A. Moss, H. I. Goldberg, and R. E. Koehler* 737
The Small Bowel Enema: Experience with 150 Examinations. *D. E. Sanders and C. S. Ho* 743
Pneumoperitoneum: Importance of Right Upper Quadrant Features. *L. Menuck and P. T. Siemers* 753
Necrotizing Enterocolitis after Open Heart Surgery Employing Hypothermia and Cardiopulmonary Bypass. *P. K. Kleinman, P. Winchester, and P. W. Brill* 757
Radiology in Primary Hyperaldosteronism. *H. Y. Yune, E. C. Klatte, C. E. Grim, M. H. Weinberger, J. P. Donohue, M. N. Yum, and H. N. Wellman* 761
Angiographic Manifestations of Ruptured Abdominal Aortic Aneurysms. *A. J. Chisolm and S. Sprayregen* 769
Pulmonary Telangiectasia. *G. Currarino, K. W. Willis, A. F. Johnson, Jr., and W. W. Miller* 775
Posttraumatic Osteolysis of the Distal Clavicle with Emphasis on Early Radiologic Changes. *A. H. Levine, M. J. Pais, and E. E. Schwartz* 781
Ossicle of the Meniscus. *R. M. Bernstein, H. E. Olsson, R. M. Spitzer, K. E. Robinson, and M. W. Korn* 785
Radiographic Findings in Early Acquired Syphilis: Case Report and Critical Review. *I. Ehrlich and M. E. Kricun* 789
Cancer in the "Cold" Breast Thermogram. *H. J. Isard* 793
Chordoma: Radiologic Evaluation of 20 Cases. *H. Firooznia, R. S. Pinto, J. P. Lin, H. H. Baruch, and J. Zausner* 797
The Value of Consultation among Radiologists. *B. J. Hillman, R. G. Swensson, S. J. Hessel, D. E. Gerson, and P. G. Herman* 807
RAPORT Radiology System: Results of Clinical Trials. *R. L. Mani* 811

ULTRASONOGRAPHY

Gray Scale Cholecystosonography: An Evaluation of Accuracy. *S. Arnon and C. J. Rosenquist* 817

RADIATION PHYSICS

The Dependence of Radiographic Mottle on Beam Quality. *G. T. Barnes* 819

RADIATION ONCOLOGY

An Evaluation of Procedures Used in Staging Carcinoma of the Cervix. *T. W. Griffin, R. G. Parker, and W. J. Taylor* 825
Carcinoembryonic Antigen in Patients Treated with Radiation Therapy for Invasive Squamous Cell Carcinoma of the Uterine Cervix. *E. Donaldson, J. R. van Nagell, Jr., E. G. Wood, Q. Pletsch, and D. M. Goldenberg* 829
Results of Involved Field and Extended Field Radiotherapy in Patients with Pathologic Stage I and II Hodgkin's Disease. *J. B. Miller, E. M. Moran, R. K. Desser, M. L. Griem, and J. E. Ultmann* 833
The Role of Radiotherapy in the Definitive Management of Rectal Carcinoma. *S. Rafla, S. Turner, F. Meleka, and N. Ghossein* 841

CASE REPORTS

Successful Transcatheter Embolic Control of Massive Hematobilia Secondary to Liver Biopsy. *J. F. Walter, B. T. Paaso, and W. B. Cannon* 847
Treatment of Symptomatic Hepatic Cyst by Percutaneous Instillation of Pantopaque. *H. M. Goldstein, D. R. Carlyle, and R. S. Nelson* 850
The Limbus Vertebra: An Anterior Disc Herniation Demonstrated by Discography. *B. Ghelman and R. H. Freiberger* 854
Patellar Giant Cell Tumor. *J. S. Wilson, H. K. Genant, A. Carlsson, and W. R. Murray* 856
Tuberculous Aortitis: A Rare Cause of Mycotic Aneurysm of the Aorta. *S. C. Efremidis, S. Lakshmanan, and J. T. Hsu* 859
Esophageal Aperistalsis Secondary to Metastatic Invasion of the Myenteric Plexus. *J. Simeone, M. Burrell, and R. Toffler* 862
Salicylate-induced Pulmonary Edema. *T. W. Broderick, R. T. Reinke, and E. Goldman* 865

Editorial: The General Radiologist and Ultrasound. *C. V. Cimmino and D. L. King* 867
Letters 868
Memorials 870
Abstracts of Current Literature 871
Book Reviews 879
News 885
Radiologic Societies 887

Vol. 127 December 1976 No. 6

SPECIAL LECTURES

Janeway Lecture: Pediatric Cancer Treatment: A Model for Oncology. *A. E. Evans* 891
ARS Presidential Address: Estrogen Therapy: A Causal Role in Endometrial Cancer? *F. N. Rutledge* 897

DIAGNOSTIC RADIOLOGY

Pathogenesis of Massively Bleeding Colonic Diverticulosis: New Observations. *M. A. Meyers, D. R. Alonso, and J. W. Baer* 901
Initial Accuracy of Esophagograms in Detection of Small Esophageal Carcinoma. *A. A. Moss, R. E. Koehler, and A. R. Margulis* 909
Gastrointestinal Perforation Without Intraperitoneal Air-Fluid Level in Neonatal Pneumoperitoneum. *R. A. Kaufman, L. R. Kuhns, A. K. Poznanski, and J. F. Holt* 915
Absent Mesosternum in Congenital Heart Disease. *R. M. Steiner, M. Kricun, and J. Shapiro* 923
Frontometaphyseal Dysplasia: Evidence for Autosomal Dominant Inheritance. *E. G. Kassner, J. O. Haller, V. H. Reddy, A. Mitarotundo, and I. Katz* 927
Effects of Radiation Therapy on Growing Long Bones. *A. A. De Smet, L. R. Kuhns, J. V. Fayos, and J. F. Holt* 935
The Single Ectopic Ureter. *L. H. Prewitt, Jr., and R. L. Lebowitz* 941
Hepatic Occlusion Venography with a Balloon Catheter in Patients with End-to-Side Portacaval Shunts. *D. Novak, G. H. Bützow, and K. Becker* 949
Arteriographic Evaluation of the Femoral Bifurcation: Value of the Ipsilateral Anterior Oblique Projection. *E. J. McDonald, Jr., J. M. Malone, R. L. Eisenberg, and R. L. Mani* 955
Extracranial Angiographic Findings in Giant Cell (Temporal) Arteritis. *A. W. Stanson, R. G. Klein, and G. G. Hunder* 957
Metrizamide Cisternography with Hypocycloidal Tomography: Preliminary Results. *G. H. Roberson, J. Brismar, K. R. Davis, J. M. Taveras and A. Weiss* 965
Fracture of the Sella Turcica. *A. B. Dublin and V. C. Poirier* 969
Intracranial Chondromas. *M. Sarwar; L. E. Swischuk, and M. M. Schechter* 973
Arachnoid Cysts on Computed Tomography. *M. Banna* 979
Anterior Mediastinal Lymphadenopathy in Sarcoidosis. *Y. M. Berkmen and B. R. Javors* 983
Radiologic Features of Gram-negative Pneumonias in the Neutropenic Patient. *J. Zornoza, A. M. Goldman, S. Wallace, M. Valdivieso, and G. P. Bodey* 989
Differences between Right and Left Lateral Chest Radiographs. *W. Riggs, Jr., and L. Parvey* 997
Gonadoblastoma: An Ovarian Tumor with Characteristic Pelvic Calcifications. *E. Q. Seymour, J. B. Hood, P. B. Underwood, Jr., and H. O. Williamson* 1001
Calcified Intraperitoneal Metastases from Ovarian Carcinoma. *J. G. Teplick, M. E. Haskin, and A. Alavi* 1003

ULTRASONOGRAPHY

Sonographic-Radiographic Correlation of Renal and Perirenal Infections. *M. Schneider, J. A. Becker, S. Staiano, and E. Campos* 1007
Angiographic and Ultrasonic Findings in Infected Simple Cysts of the Kidney. *K. J. Cho, N. Maklad, J. Curran, and Y. M. Ting* 1015

NUCLEAR MEDICINE

An Approach to Cardiac Malposition and the Heterotaxy Syndrome Using ^{99m}Tc Sulfur Colloid Imaging. *P. M. Fitzer* 1021

RADIATION BIOLOGY

Inherent Cellular Radiosensitivity of Human Tumors of Varying Clinical Curability. *R. R. Weichselbaum, J. Epstein, J. B. Little, and P. Kornblith* 1027

CASE REPORTS

Balloon Obturation Bowel Obstruction: A Hazard of Drug Smuggling. *T. A. Freed, L. N. Sweet, and P. J. Gauder* 1033
Hemobilia Following Needle Biopsy of the Liver. *R. A. Seltzer, S. B. Rossiter, L. R. Cooperman, and D. Liebowitz* 1035
Angiographic Demonstration of a Pancreatic "Vipoma" in the WDHA Syndrome. *M. L. Thomas, G. H. R. Lamb, and M. A. Barraclough* 1037
Ingested Foreign Bodies Simulating Polyposis: Report of Six Cases. *H. C. Press, Jr., and T. W. Davis* 1040
Cystic Degeneration of the Popliteal Artery. *A. Schlesinger and L. Gottesman* 1043
Ossified Pulmonary Metastases from Giant Cell Tumor of Bone. *F. M. Hall, H. A. Frank, R. B. Cohen, and M. L. Ezpeleta* 1046
Pulmonary Blastoma: Case Report and Literature Review. *S. S. Han, J. S. Wills, and O. S. Allen, II* 1048
Computed Tomography: Contrast Enhancement in Resolving Intracerebral Hemorrhage. *A. V. Messina* 1050
Bilateral Persistent Carotid-Basilar Anastomoses. *J. Karasawa, H. Kikuchi, S. Furuse, T. Sakaki, Y. Yoshida, and H. Ohnishi* 1053

TECHNICAL NOTES

A Simple Marking Device for Knee Arthrography. *E. S. Gerson and H. J. Griffiths* 1057
CT Longitudinal Scan. *J. R. Haaga, R. J. Alfidi, W. J. MacIntyre, T. R. Havrilla, and T. F. Meaney* 1059

Editorial: Computed Body Tomography and Cancer. *R. J. Alfidi, A. R. Antunez, and J. R. Haaga* 1061
Letters 1062
In Memoriam 1063
Abstracts of Current Literature 1064
Book Reviews 1071
News 1075
AJR Reviewers and Abstractors, 1976 1076
Volume Index 1079

Author Index Volume 127

Index key: b = book review, c = case report, e = editorial, l = letter, o = obituary, t = technical note

Aaron H, see Brill PW
Abadir R, Parker RG, Brady LW: Radiation oncology: is there a better name? (l), 868
Abell MR, see Martel W
Ackerman RH, see Davis KR
Agamanolis D, see Conomy JP
Alavi A, see Teplick JG
Alfidi RJ, Antunez AR, Haaga JR: Computed body tomography and cancer (e), 1061
Alfidi RJ, Haaga JR, Havrilla TR, Pepe RG, Cook SA: Computed tomography of the liver, 69
Alfidi RJ, see Haaga JR
Alfidi RJ, see Reich NE
Allan TNK, see Martel W
Allen OS II, see Han SS
Allen WE III, see Rothman SLG
Alonso DR, see Baltaxe HA
Alonso DR, see Meyers MA
Alrich EE, see Tegtmeyer CJ
Amberg J, see Menuck LS
Amplatz K, see Castaneda-Zuniga W
Antoniades J, see Wallner PE
Antonovic R, Rösch J, Dotter CT: Value of systemic arterial heparinization in transfemoral angiography: a prospective study, 223
Antunez AR, see Alfidi RJ
Armenian HK, see Kabakian HA
Arevalo F, Katzen BT: Bilateral subclavian steal syndrome (c), 668
Arndt RD, see Horns JW
Arnon S, Rosenquist CJ: Gray scale cholecystosonography: an evaluation of accuracy, 817
Aronsohn RS, Hart WR, Martel W: Metaphyseal chondroblastoma of bone (c), 686
Asbell SO, see Wallner PE
Axelbaum SP, Schellinger D, Gomes MN, Ferris RA, Hakkal HG: Computed tomographic evaluation of aortic aneurysms, 75

Bachman D, Wolff M: Pulmonary metastases from benign-appearing smooth muscle tumors of the uterus, 441
Baer JW, see Meyers MA
Baillet F, see Pierquin B
Bajetta E, see Veronesi U
Baker HL Jr: Computed tomography and neuroradiology: a fortunate primary union, 101
Baltaxe HA, Levin AR, Alonso DR: Appearance of the interventricular septum in obstructive lesions of the left ventricular outflow tract, 573
Baltaxe HA, see Sos TA
Bancks N, Zornoza J: Pseudocavitary granulomas of the lung, 251
Banna M: Arachnoid cysts on computed tomography, 979
Barbaric ZL: Autonomic dysreflexia in patients with spinal cord lesions: complication of voiding cystourethrography and ileal loopography, 293
Barden RP, Richard Hall Chamberlain, 1915–1975 (o), 358
Barnes GT: The dependence of radiographic mottle on beam quality, 819
Barraclough MA, see Thomas ML
Baruch HH, see Firooznia H
Baum S, see White AF
Becker JA, see Schneider M
Becker K, see Novak D
Belin RP, see Selke AC Jr
Beretta G, see Veronesi U
Berger PE, Kirks DR, Gilday DL, Fitz CR, Harwood-Nash DC: Computed tomography in infants and children: intracranial neoplasms, 129
Bergström M, Greitz T: Stereotaxic computed tomography, 167
Bergström M, Sundman R: Picture processing in computed tomography, 17
Berkmen YH, Javors BR: Anterior mediastinal lymphadenopathy in sarcoidosis, 983
Berlin AJ Jr, see Weinstein MA
Bernardino ME, McClennan BL: High dose urography: incidence and relationship to spontaneous peripelvic extravasation, 373
Bernstein RM, Olsson HE, Spitzer RM, Robinson KE, Korn MW: Ossicle of the meniscus, 785
Berry HC, see Parker RG
Biello DR, Coleman RE, Stanley RJ: Correlation of renal images on bone scan and intravenous pyelogram, 633
Bilaniuk LT, see Zimmerman RA
Black TJ, see Gold RP
Bloomer WD, see Sugarbaker PH
Bodey GP, see Zornoza J
Boller M, Fiocchi C, Brown CH: Pseudoobstruction in ceroidosis, 277
Bonadonna G, see Veronesi U
Bone RC, see Roberson GH
Borg SA, Whitehouse GH, Griffiths GJ: A mobile calcified amputated appendix epiploica (c), 349
Boswell W, see Robbins AH
Bradley EL, see Gonzalez AC
Brady LW, see Abadir R
Brady LW Jr, see Wallner PE
Brahme F, see Menuck LS
Branan R, Wilson CB: Arachnoid granulations simulating osteolytic lesions of the calvarium (c), 523
Brill PW, Krasna IH, Aaron H: An early sign in neonatal adrenal hemorrhage, 289
Brill PW, see Kleinman PK
Briner J, see Pouliadis GP
Brismar J, see Roberson GH
Broderick TW, Reinke RT, Goldman E: Salicylate-induced pulmonary edema (c), 865
Brown CH, see Boller M
Bruwer A: "If you are pregnant, or if you think you might be . . ." (e), 696
Bruwer A: *Natural background radiation in the United States* (b), 882
Buranasiri S, see White AF
Burcharth F, Nielbo N: Percutaneous transhepatic cholangiography with selective catheterization of the common bile duct, 409
Burke EC, see Forbes GS
Burrell M, see Simeone J
Bützow GH, see Novak D

Campos E, see Schneider M
Cannon WB, see Walter JF
Carlson DH, O'Connor J: Congenital dislocation of the knee, 465
Carlsson A, see Wilson JS
Carlyle DR, see Goldstein HM
Casarella WJ, see Gold RP
Castaneda-Zuniga W, Knight L, Formanek A, Moore R, D'Souza V, Amplatz K: Hemodynamic assessment of obstructive aortoiliac disease, 559
Castellino RA, see Dunnick NR
Cavaluzzi JA, Kaufman SL, White RI Jr: Vasopressin control of massive hemorrhage in chronic ulcerative colitis (c), 672
Chaffey JT, see Sugarbaker PH
Chernak ES, see Jelden GL
Chisolm AJ, Sprayregen S: Angiographic manifestations of ruptured abdominal arotic aneurysms, 769
Chiu LC, Fodor LB, Cornell SH, Christie JH: Computed tomography and brain scintigraphy in ischemic stroke, 481
Cho KJ, Maklad N, Curran J, Ting YM: Angiographic and ultrasonic findings in infected simple cysts of the kidney, 1015
Cho KJ, Reuter SR, Schmidt R: Effects of experimental hepatic artery embolization on hepatic function, 563
Cho KJ, see Reuter SR
Christensen GM: *Advances in chemical radiosensitization* (b), 879
Christie, JH, Mori H, Go RT, Cornell SH, Schapiro RL: Computed tomography and radionuclide studies in the diagnosis of intracranial disease, 171
Christie JH, see Chiu LC
Chuang VP: Aberrant gallbladder: angiographic and radioisotopic considerations, 417
Chuang VP, see Reuter SR
Ciborowski L, see Merz T

Cimmino CV, King DL: The general radiologist and ultrasound (e), 867
Clark K, Rowan D: Electrical stimulation for anal sphincter control in barium enema examination: an extended trial, 429
Clements JL Jr, see Gonzalez AC
Cloe LE: Health planning for computed tomography: perspectives and problems, 187
Cohen RB, see Hall FM
Coleman RE, see Biello DR
Coleman RE, see Ter-Pogossian MM
Common HH, see Rösch J
Conomy JP, Weinstein MA, Agamanolis D, Holt WS: Computed tomography in progressive multifocal leukoencephalopathy (c), 663
Conrardy PA, see Goodman LR
Conroy RM, Vander Molen RL: Scrotal "arteriocele" from iliac artery occlusion (c), 670
Cook SA, see Alfidi RJ
Cooperman LR, see Seltzer RA
Corbett ED, see Sugarbaker PH
Cornell SH, see Chiu LC
Cornell SH, see Christie JH
Crowell RM, see Davis KR
Cundiff JH, see Grant W III
Curran J, see Cho KJ
Currarino G: Normal variants and congenital anomalies in the region of the obelion, 487
Currarino G, Willis KW, Johnson AF Jr, Miller WW: Pulmonary telangiectasia, 775

Dalinka MK, Garofola J: Infrapatellar synovial fold: a cause for confusion in the evaluation of the anterior cruciate ligament, 589
Damsker JI, see Wallner PE
Davis KR, New PFJ, Ojemann RG, Crowell RM, Morawetz RB, Roberson GH: Computed tomographic evaluation of hemorrhage secondary to intracranial aneurysm, 143
Davis KR, see Roberson GH
Davis KR, Taveras JM, Roberson GH, Ackerman RH: Some limitations of computed tomography in the diagnosis of neurological diseases, 111
Davis TW, see Press HC Jr
Deeb ZL, see Kabakian GA
Deeths TM, Stanley RJ: Parametrial calcification in cervical carcinoma patients treated with radioactive gold, 511
DeSmet AA, Kuhns LR, Fayos JV, Holt JF: Effects of radiation therapy on growing long bones, 935
De Smet AA, Tubergen DG, Martel W: Nodular lymphoid hyperplasia of the colon associated with dysgammaglobulinemia (c), 515
Desser RK, see Miller JB
Dhaliwal RS, see Jelden GL
Dhitavat V, see Piyachon C
Di Saia PJ, see Morrow CP
Donaldson E, Van Nagell JR Jr, Wood EG, Pletsch Q, Goldenberg DM: Carcinoembryonic antigen in patients treated with radiation therapy for invasive squamous cell carcinoma of the uterine cervix, 829
Donohue JP, see Yune HY
Dotter CT, see Antonovic R
Dotter CT, see Rösch J
Dreyfuss JR, see Ferrucci JT Jr
D'Souza V, see Castaneda-Zuniga W
Dublin AB, Poirier VC: Fracture of the sella turcica, 969
Duchesneau PM, see Weinstein MA
Dunn HK, see Gelman MI
Dunnick NR, Parker BR, Warnke RA, Castellino RA: Radiographic manifestations of malignant histiocytosis, 611

Efremidis SC, Lakshmanan S, Hsu JT: Tuberculous aortitis: a rare cause of mycotic aneurysm of the aorta (c), 859
Ehrlich I, Kricun M: Radiographic findings in early acquired syphilis: case report and critical review, 789
Eisenberg RL, see McDonald EJ Jr
Ekelund L, Gothlin J: Compensatory renal enlargement in older patients, 713
El Deeb M, see Roberson GH
Epstein J, see Weichselbaum RR
Evans AE: Janeway lecture: Pediatric cancer treatment: a model for oncology, 891
Evens RG, Jost RG: Economic analysis of computed tomography units, 191
Eyal FG, see Siegle RL
Eyler WR, see Figley MM
Ezpleleta ML, see Hall FM

Fayos JV, see DeSmet AA
Ferris RA, see Axelbaum SP
Ferrucci JT Jr, Wittenberg J, Sarno RA, Dreyfuss JR: Fine needle transhepatic cholangiography: a new approach to obstructive jaundice, 403
Figge DC: *International histological classification of tumours No. 13: Histological typing of femal genital tract tumours* (b), 881
Figley MM: Visualization of left ventricular aneurysms (l), 868
Figley MM, Eyler WR: Orientation of CT images (e), 199
Fiocchi C, see Boller M
Firooznia H, Pinto RS, Lin JP, Baruch HH, Zausner J: Chordoma: radiologic evaluation of 20 cases, 797
Fitz CR, see Berger PE
Fitzer PM: An approach to cardian malposition and the heterotaxy syndrome using 99m Tc sulfur colloid imaging, 1021
Fodor LB, see Chiu LC
Fontana A, see Pouliadis GP
Forbes GS, Hartman GW, Burke EC, Segura JW: Genitourinary involvement in chronic granulomatous disease of childhood (c), 683
Fordham S, see Schatz CJ
Formanek A, see Castaneda-Zuniga W
Frank HA, see Hall FM
Freed TA, Sweet LN, Gauder PJ: Balloon obturation bowel obstruction: a hazard of drug smuggling (c), 1033
Freiberger RH, see Goldman AB
Frey DG: *Flash radiography* (b), 1073
Fullenlove TM: A Justin Williams, 1901–1976 (o), 535
Furman RS, see Giustra PE
Furuse S, see Karasawa J

Gagliardi RA: Eugene J Keeffe, 1916–1976 (o), 870
Garofola J, see Dalinka MK
Gauder PJ, see Freed TA
Gedgaudas E, Peterson HO: American Roentgen Ray Society section on instruction: condensed schedule of courses, 207
Gelman MI, Dunn HK: Radiology of knee joint replacement, 447
Genant HK, see Wilson JS
Gennari L, see Veronesi U
Gerdes AR, see Parker RG
Gerlock AJ Jr: *Angiography of posterior fossa tumors* (b), 710
Gerson DE, see Hillman BJ
Gerson ES, Griffiths HJ: A simple marking device for knee arthrography (t), 1057
Ghelman B, Freiberger RH: The limbus vertebra: an anterior disc herniation demonstrated by discography (c), 854
Ghossein N, see Rafla S
Gilday DL, see Berger PE
Glassburn JR, see Wallner PE
Go RT, see Christie JH
Gold RP, Black TJ, Rotterdam H, Casarella WJ: Radiologic and pathologic characteristics of the WDHA syndrome, 397
Goldberg HI, see Moss AA
Goldenberg DM, see Donaldson E
Goldman AB, Katz MC, Freiberger RH: Posttraumatic adhesive capsulitis of the ankle: arthrographic diagnosis, 585
Goldman AM, see Zornoza J
Goldman E, see Broderick TW
Goldstein EG: *Panoramic dental radiography* (b), 1074
Goldstein H, Carlyle DR, Nelson RS: Treatment of symptomatic hepatic cyst by percutaneous instillation of pantopaque (c), 850
Goldstein H, Miller MH: Air contract colon examination in patients with colostomies, 607
Gomes MN, see Axelbaum SP
Gonzalez AC, Bradley EL, Clements JL Jr: Pseudocyst formation in acute pancreatitis: ultrasonographic evaluation of 99 cases, 315

Gonzalez AC: *Ultrasonics in medicine* (b), 710
Goodman LR, Conrardy PA, Laing F, Singer M: Radiographic evaluation of endotracheal tube position, 433
Gordon DH, see Twersky J
Gothelin J, see Ekelund L
Gottesman L, see Schlesinger A
Gramiak R, Waag RC: Cardiac reconstruction imaging in relation to other ultrasound systems and computed tomography, 91
Grant W III, Cundiff JH, Hanson WF: Use of auxiliary collimating devices in the treatment for breast cancer with co teletherapy units. I. Dosimetric considerations, 649
Grant W III, see Hanson WF
Gray GF Jr, see Sos TA
Greenfield LD: *Assessment of skeletal maturity and prediction of adult height (TW2) method* (b), 881
Greenfield LD: *Radioimmunoassay* (b), 544
Greitz T, see Bergström M
Greitz T: Trends in the development of reconstruction tomography in neuroradiology, 125
Griem ML, see Miller JB
Griffin TW, Parker RG, Taylor WJ: An evaluation of procedures used in staging carcinoma of the cervix, 825
Griffiths GJ, see Borg SA
Griffiths HJ, see Gerson ES
Grim CE, see Yune HY
Grossman M: *M-Mode echocardiographic techniques and pattern recognition* (b), 545
Guistra PE, Furman RS, Roberts L, Killoran PJ: Synovial osteochondromatosis involving the elbow (c), 347
Guntheroth WG: Echocardiography: territorial imperative (e), 534

Haaga JR, see Alfidi RJ
Haaga JR, Alfidi RJ, MacIntyre WJ, Havrilla TR, Meaney TF: CT longitudinal scan (t), 1059
Haaga JR, see Jelden GL
Hakkal HG, see Axelbaum SP
Hall FM, Frank HA, Cohen RB, Ezpeleta ML: Ossified pulmonary metastases from giant cell tumor of bone (c), 1046
Haller JO, see Kassner EG
Hans SS, Wills JS, Allen OS II: Pulmonary blastoma (c), 1048
Han SY, Witten DM: Carcinoma of the urachus (c), 351
Hanson WF, see Grant W III
Hanson WF, Grant W III: Use of auxiliary collimating devices in the treatment for breast cancer with co teletherapy units. II. Dose to the skin, 653
Hart WR, see Aronsohn RS
Hartman GW, see Forbes GS
Hartman GW, see Sheedy PF II
Harvie JN, Lester RS, Little AH: Sacroiliitis in severe psoriasis, 579
Harwood-Nash DC, see Berger PE
Haskin ME, see Teplick JG
Hattery RR, see Sheedy PF II
Havrilla TR, see Alfidi RJ
Havrilla TR, see Haaga JR
Hazra T, see Merz T
Heitzman ER: *Special procedures in chest radiology* (b), 884
Herman PG, see Hillman BJ
Herman RE, see Sampliner J
Hessel SJ, see Hillman BJ
Hillman BJ, Swensson RG, Hessel SJ, Gerson DE, Herman PG: Value of consultation among radiologists, 807
Hinck VC: Spinal needle with depth guide: a new design for simplifying subarachnoid injections (t), 354
Hirschfield JS, see Jelaso DV
Ho CS, see Sanders DE
Hood JB, see Seymour EQ
Holt JF, see DeSmet AA
Holt JF, see Kaufman RA
Holt WS, see Conomy JP
Horns JW, Arndt RD: Percutaneous spot localization of nonpalpable breast lesions, 253
Hounsfield GN: Picture quality of computed tomography, 3
Hsu JT, see Efremidis SC
Hubsher J, see Sargent EN
Hunder GG, see Stanson AW
Hyman RA: *An atlas of normal vertebral angiograms* (b), 710

Isard HJ: Cancer in the "cold" breast thermogram, 793
Jackson DC, see Thompson WM
Javors BR, see Berkmen YM
Jelaso DV, Hirschfield JS: Jaundice from impacted sediment in a T tube: recognition and treatment, 413
Jelden GL, Chernak ES, Rodriguez-Antunez A, Haaga JR, Lavik PS, Dhaliwal RS: Further progress in CT scanning and computerized radiation therapy treatment planning, 179
Joffe N: Roentgenologic abnormalities of the urinary bladder secondary to Crohn's disease, 297
Johnson AF Jr, see Currarino G
Johnsrude IS, see Thompson WM
Jona JZ, see Selke AC Jr
Jost RG, see Evens RG

Kabakian HA, Armenian HK, Deeb ZL, Rizk GK: Asymmetry of the pelvin ureters in normal females, 723
Kagan AR: *Gynecologic oncology* (b), 879
Karasawa J, Kikuchi H, Furuse S, Sakaki T, Yoshida Y, Ohnishi H: Bilateral persistent carotid-basilar anastomoses (c), 1053
Kassner EG, Haller JO, Reddy VH, Mitarotundo A, Katz I: Frontometaphyseal dysplasia: evidence for autosomal dominant inheritance, 927
Katz I, see Kassner EG
Katz MC, see Goldman AB
Katzen BT, see Arevalo F
Kaufman RA, Kuhns LR, Poznanski AK, Holt JF: Gastrointestinal perforation without intraperitoneal air-fluid level in neonatal pneumoperitoneum, 915
Kaufman SL, see Cavaluzzi JA
Kazam E, see Wixson D
Keats TE, see Tegtmeyer CJ
Kied EL, see Rothman SLG
Kikuchi H, see Karasawa J
Killoran PJ, see Giustra PE
King DL, see Cimmino CV
Kirchner SG: *Wilms' tumor* (b), 544
Kirks DR, see Berger PE
Kirks DR: *Practical approaches to pediatric radiology* (b), 883
Klatte EC, see Yune HY
Klein RG, see Stanson AW
Kleinman PK, Winchester P, Brill PW: Necrotizing enterocolitis after open heart surgery employing hypothermia and cardiopulmonary bypass, 757
Knight L, see Castaneda-Zuniga W
Koehler RE, see Moss AA
Kollins SA, see Sampliner J
Korn MW, see Bernstein RM
Kornblith P, see Weichselbaum RR
Korones SB, see Siegle RL
Kotalik JF: *Cancer of the head and neck* (b), 881
Krasna IH, see Brill PW
Kricun M, see Steiner RM
Kricun ME, see Ehrlich I
Kroening PM, Mucha R: Update on the independent radiation monitor (IRM) (t), 355
Kuhns LR, see DeSmet AA
Kuhns LR, see Kaufman RA

Laing F, see Goodman LR
Lakshmanan S, see Efremidis SC
Lamb GHR, see Thomas ML
Lame EL, Redick TJ: A new radiographic technique for fractures of the orbit and maxilla, 473
Lande A: Takayasu's arteritis and congenital coarctation of the descending thoracic and abdominal aorta: a crtical review, 227
Lebowitz RL, see Prewitt LH Jr
Lee JK, see Marquis JR
Lee KR, Preston DF, Martin NL, Robinson RG: Angiographic documentation of systemic-portal venous shunting as a cause of a liver scan "hot spot" in superior vena caval obstruction, 637
Lehman CA, Schreiber MH: Autonomous hyperparathyroidism in patients on maintenance home dialysis, 377
Lester RS, see Harvie JN
Levin AR, see Baltaxe HA
Levin DC, see Twersky J
Levine AH, Pais MJ, Schwartz EE: Posttraumatic osteolysis of the distal clavicle with emphasis on early radiologic changes, 781

Levitt RG, see Stanley RJ
Levy DS, Salter MM, Roth RE: Postoperative irradiation in the prevention of keloids, 509
Liebowitz D, see Seltzer RA
Lin JP, see Firooznia H
Lin PP, Rogers LF: Simplified method for standardization of roentgenographic image quality using penetration quality measurements, 659
Little AH, see Harvie JN
Little JB, see Weichselbaum
Loughead J, see Wallner PE

MacIntyre WJ, see Haaga JR
MacIntyre WJ, see Reich NE
Maisel RH, see Roberson GH
Maklad N, see Cho KJ
Mall JC, see Prager RJ
Malone J, see McDonald EJ Jr
Mani RL: RAPORT radiology system: results of clinical trials, 811
Mani RL, see McDonald EJ Jr
Maravilla A *Synopsis of analysis of roentgen signs in general radiology* (b), 1073
Margulis AR, see Moss AA
Martel W, see Aronsohn RS
Martel W, Bell MR, Allan TNK: Lymphoreticular hyperplasia of the stomach (pseudolymphoma), 261
Martel W, see De Smet AA
Martel W, Seeger JF, Wicks JD, Washburn RL: Traumatic lesions of the discovertebral junction in lumbar spine, 457
Martin NL, see Lee KR
Marquis JR, Lee JK: Extensive central nervous system calcification in a stillborn male infant due to cytomegalovirus infection (c), 665
Matsumoto T, see Wallner PE
McAlister WH: *Oral roentgenographic diagnosis* (b), 882
McClenahan JL: Heard in Philadelphia (l), 869
McClennan BL, see Bernardino ME
McDonald EJ Jr, Malone J, Eisenberg RL, Mani RL: Arteriographic evaluation of the femoral bifurcation: value of the ipsilateral anterior oblique projection, 955
Meadows PM: *Clinical applications of the electron beam* (b), 1074
Meakins JL, Stein LA Postgastrectomy distortion of the pancreatic ducts simulating carcinoma (c), 675
Meaney TF, see Haaga JR
Meaney TF, see Reich NE
Meleka F, see Rafla S
Menanteau BP: *Fundamentals of vascular radiology* (b), 1072
Menuck L, Siemers PT: Pneumoperitoneum: importance of right upper quadrant features, 753
Menuck LS, Brahme F, Amberg J, Sherr HP: Colonic changes of herpes zoster, 273
Merz T, Hazra T, Ross M, Ciborowski L: Transformation delay of lymphocytes in patients undergoing radiation therapy, 337
Messina AV: Computed tomography: contrast enhancement in resolving intracerebral hemorrhage (c), 1050
Messina AV, see Siegel RM
Meyers MA, Alonso DR, Baer JW: Pathogenesis of massively bleeding colonic diverticulosis: new observations, 901
Meyers HI, see Robbins AH
Meyers HI, see Sargent EN
Miller EI: *Diagnostic nuclear medicine* (b), 1073
Miller JB, Moran EM, Desser RK, Griem ML, Ultmann JE: Results of involved field and extended field radiotherapy in patients with pathologic stage I and II Hodgkin's disease, 833
Miller MH, see Goldstein HM
Miller SW: *Radiographic anatomy of the coronary arteries: an atlas* (b), 1071
Miller WW, see Currarino G
Mitarotundo A, see Kassner EG
Moore R, see Castaneda-Zuniga W
Moran EM, see Miller JB
Morawetz RB, see Davis KR
Mori H, see Christie JH
Morrow CP, Di Saia PJ, Townsend DE: Role of postoperative irradiation in the management of stage I adenocarcinoma of the endometrium, 325
Moseley RD Jr: Klaus Ranniger, 1926–1976 (o), 699
Moss AA, Goldberg HI, Koehler RE: Radiographic evaluation of complications after jejunoileal bypass surgery, 737
Moss AA, Koehler RE, Margulis AR: Initial accuracy of esophagograms in detection of small esophgeal carcinoma, 909
Mucha R, see Kroening PM
Muhm JR, see Sheedy PF II
Murray WR, see Wilson JS

Nelson RS, see Goldstein HM
New PFJ, see Davis KR
Nielbo N, see Burcharth F
Novak D, Bützow GH, Becker K: Hepatic occlusion venography with a balloon catheter in patients with end-to-side portacaval shunts, 949

O'Connor J, see Carlson DH
Ohnishi H, see Karasawa J
Ojemann RG, see Davis KR
Olmstead WW: *Radiology of the orbit* (b), 544
Olmsted WW, Reagin DE: Pathophysiology of enlargement of the small bowel fold, 423
Olsson HE, see Bernstein RM
Olsson HE, see Wandtke JC
Paaso BT, see Walter JF
Pais MJ, see Levine AH
Parker BR, see Dunnick NR
Parker RG, see Abadir R
Parker RG, Berry HC, Gerdes AJ, Soronen, Shaw CM: Fast neutron beam radiotherapy of glioblastoma multiforme, 331
Parker RG, see Griffin TW
Parvey L, see Riggs W Jr
Patel S, see Zimmerman RA
Patel SK: *Tumors of the kidney, renal pelvis, and ureter* (b), 880
Patterson, AK, see Roberson GH
Pepe RG, see Alfidi RJ
Pepe RG, see Reich NE
Peterson HO, see Gedgaudas E
Pfister RC, see Yoder IC
Pierquin B, Baillet F, Wilson JF: Radiation therapy in the management of primary breast cancer, 645
Pierquin B, Wilson JF (translator): Destiny of brachytherapy in oncology, 495
Pinto RS, see Firooznia H
Piyachon C, Poshyachinda M, Dhitavat V: Hepatoscintigraphy, arteriography, and ultrasonography in preoperative diagnosis of choledonchal cyst (c), 520
Pletsch Q, see Donaldson E
Poirier VC, see Dublin AB
Pomeroy RP, see Reuter SR
Poole CA, see Wexler HA
Porter JM, see Rösch J
Poshyachinda M, see Piyachon C
Pouliadis GP, Wellauer J, Streuli R, Fontana A, Briner J: Arteriographic findings in hyperergic granulomatosis and vasculities of a kidney (c), 526
Poznanski AK, see Kaufman RA
Prager RJ, Mall JC: Arthrographic diagnosis of synovial chondromatosis (c), 344
Prasasvinichai S, see Wallner PE
Press HC Jr, Davis TW: Ingested foreign bodies simulating polyposis (c), 1040
Preston DF, see Lee KR
Prewitt LH Jr, Lebowitz RL: Single ectopic ureter, 941

Rabinowitz JG, see Siegle RL
Rafla S, Turner S, Meleka F, Ghossein N: Role of radiotherapy in the definitive management of rectal carcinoma, 841
Rappoport AS: Goutlike lesions in rheumatoid arthritis, 1062
Reagin DE, see Olmsted WW
Reddy VH, see Kassner EG
Redick TJ, see Lame EL
Reich NE, Seidelmann FE, Tubbs RR, MacIntyre WJ, Meaney TF, Alfidi RJ, Pepe RG: Determination of bone mineral content using CT scanning, 593
Reinke RT, see Broderick TW
Reinke RT, see Siemers PT

Resnick D: Gout-like lesions in rheumatoid arthritis (l), 1062
Reuter SR, see Cho KJ
Reuter SR, Pomeroy PR, Chuang VP, Cho KJ: Embolic control of hypertension caused by segmental renal artery stenosis, 389
Riggs W Jr, Parvey L: Differences between right and left lateral chest radiographs, 997
Rizk GK, see Kabakian HA
Robbins AH, Sargent EN, Vincent ME, Boswell W, Meyers HI: Double-blind comparison of meglumine iodoxamate (cholovue) and meglumine iodipamide (cholografin), 257
Roberson GH, Brisman J, Davis KR, Taveras JM, Weiss A: Metrizamide cisternography with hypocycloidal tomography: preliminary results, 965
Roberson GH, Patterson AK, El Deeb M, Maisel RH, Bone RC: Sphenoethmoidal mucocele: radiographic diagnosis, 595
Roberson GH, see Davis KR
Roberts L, see Giustra PE
Robinson F, see Shapiro R
Robinson KE, see Bernstein RM
Robinson RG, see Lee KR
Rodriguez-Antunez A, see Jelden GL
Rogers LF, see Lin PP
Rohrmann CA Jr, see Schuffler MD
Rohrmann CA: *Radiology of the small intestine* (b), 879
Rösch J, see Antonovic R
Rösch J, Dotter CT, Seaman AJ, Porter JM, Common HH: Healing of deep venous thrombosis: venographic findings in a randomized study comparing streptokinase and heparin, 553
Rosenquist CJ, see Arnon S
Ross M, see Merz T
Rossiter SB, see Selter RA
Roth RE, see Levy DS
Rothman SLG, Kier EL, Allen WE III: Radiology of transsphenoidal hypophysectomy: a review of 100 cases, 601
Rotterdam H, see Gold RP
Rowan D, see Clark K
Rushmer RF: Technologic imperative (e), 356
Rutledge FN: Presidential address: estrogen therapy: a causal role in endometrical cancer?, 897

Sagel SS, see Stanley RJ
Sakaki T, see Karasawa J
Salama R, Weissman SL: Unilateral dysplasia of the superior articular facet of the axis (c), 525
Salter MM, see Levy DS
Sampliner J, Kollins SA, Hermann RE: Intraluminal duodenal diverticulum associated with trisomy 21 (c), 677
Sanders DE, Ho CS: Small bowel enema: experience with 150 examinations, 743
Sargent EN: *Chronic lung obstruction in lung disease* (b), 1071
Sargent EN, Meyers HI, Hubsher J: Cholecystokinetic cholecystography: efficacy and tolerance study of sincalide, 267
Sargent EN, see Robbins AH
Sarno RA, see Ferrucci JT Jr
Sarwar M, Swischuk LE, Schechter MM: Intracranial chondromas, 973
Schatz CJ, Fordham S: Acupuncture needles: a new foreign body in the ear (c), 688
Schechter MM, see Sarwar M
Schellinger D, see Axelbaum SP
Schlesinger A, Gottesman L: Cystic degeneration of the popliteal artery (c), 1043
Schmidt R, see Cho KJ
Schneider M, Becker JA, Staiano S, Campos E: Sonographic-radiographic correlation of renal and perirenal infections, 1007
Schreiber MH: *Fundamentals of radiology* (b), 545
Schreiber MH, see Lehman CA
Schuffler MD, Rohrmann CA Jr, Templeton FE: Radiologic manifestations of idiopathic intestinal pseudoobstruction, 729
Schwartz EE, see Levine AH
Schwartz SS: Dissent of an eclectic (l), 1063
Seaman AJ, see Rosch J
Seeger JF, see Martel W
Segura JW, see Forbes GS
Seidelmann FR, see Reich NE
Selke AC Jr, Jona JZ, Belin RP: Massive enlargement of the ileocecal valve due to lymphoid hyperplasia (c), 518
Seltzer RA, Rossiter SB, Cooperman LR, Liebowitz D: Hemobilia following needle biopsy of the liver (c), 1035
Seymour EQ, Hood JB, Underwood PB Jr, Williamson HO: Gonadoblastoma: an ovarian tumor with characteristic pelvic calcifications, 1001
Sewall W: *Cancer therapy abstracts* (b), 880
Shapiro J, see Steiner RM
Shapiro R, Robinson F: Anomalies of the craniovertebral border, 281
Shapiro R, Robinson F: Os incae, 469
Shapiro RL, see Christie JH
Shaub MS: *Fundamentals of abdominal and pelvic ultrasonography* (b), 544
Shaw CM, see Parker RG
Sheedy PF II, Stephens DH, Hattery RR, Muhm JR, Hartman GW: Computed tomography of the body: initial clinical trial with the EMI prototype, 23; erratum, 691
Shehadi WH: *Traite de Radiodiagnostic, XI: Rhumatologie, articulations, parties molles* (b), 1074
Sherr HP, see Menuck LS
Siegel RL, Rabinowitz JG, Korones SB, Eyal FG: Early diagnosis of necrotizing enterocolitis, 629
Siegel ME: *Radionuclide studies of the genitourinary system* (b), 880
Siemers PT, see Menuck L
Siemers PT, Reinke RT: Perforation of the nasopharynx by nasagastric intubation: a rare cause of left pleural effusion and pneumomediastinum, (c), 341
Siemsen JK, see Waxman AD
Sigel RM, Messina AV: Computed tomography: anatomic basis of the zone of diminished density surrounding meningiomas, 139
Simeone J, Burrell M, Toffler R: Esophageal aperistalisis secondary to metastatic invasion of the myenteric plexus (c), 862
Singer MM, see Goodman LR
Sobel BE, see Ter-Pogossian MM
Soronen MD, see Parker RG
Sos TA, Gray GF Jr, Baltaxe HA: Angiographic appearance of benign renal oxyphilic adenoma, 717
Spinelli P, see Veronesi U
Spitzer RM, see Bernstein RM
Spitzer RM, see Wandtke JC
Sprayregen S, see Chisolm AJ
Stadnalnik RC: *Introductory physics of nuclear medicine* (b), 1072
Staiano S, see Schneider M
Stanley RJ, Sagel SS, Levitt RG: Computed tomography of the body: early trends in application and accuracy of the method, 53
Stanley RJ, see Biello DR
Stanley RJ, see Deeths TM
Stanson AW, Klein RG, Hunder CG: Extracranial angiographic findings in giant cell (temporal) arteritis, 957
Stein LA, see Meakins JL
Steiner RM, Kricun M, Shapiro J: Absent mesosternum in congenital heart disease, 923
Stephens DH, see Sheedy PF II
Streuli R, see Pouliadis GP
Sugarbaker PH, Bloomer WD, Corbett ED, Chaffey JT: Carcinoembryonic antigen (CEA) monitoring of radiation therapy for colorectal cancer, 641
Sundman R, see Bergström M
Sweet LN, see Freed TA
Swensson RG, see Hillman BJ
Swischuk LE, see Sarwar M
Swischuk LE: Two lesser known but useful signs of neonatal pneumothorax, 623

Tancini G, see Veronesi U
Taveras JM, see Davis KR
Taveras JM, see Roberson GH
Taylor WJ, see Griffin TW
Tegtmeyer CH, Alrich EM, Keats TE: Angiography of mediastinal parathyroid adenomas, 243
Templeton FE, see Schuffler MD
Teplick JG, Haskin ME, Alavi A: Calcified intraperitoneal metastases from ovarian carcinoma, 1003

Ter-Pogossian MM: Challenge of computed tompgraphy (e), 1
Ter-Pogossian MM, Weiss ES, Coleman RE, Sobel BE: Computed tomography of the heart, 79
Thomas ML, Lamb GHR, Barraclough MA: Angiographic demonstration of a pancreatic "vipoma" in the WDHA syndrome (c), 1037
Thompson WW, Jackson DC, Johnsrude IW: Aortoenteric and paraprostheticenteric fistulas: radiologic findings, 235
Ting YM, see Cho KJ
Toffler R, see Simeone J
Townsend DE, see Morrow CP
Tubbs RR, see Reich NE
Tubergen DG, see De Smet AA
Turner S, see Rafla S
Twersky J, Levin DC, Twersky N, Gordon DH: Further observations on pulmonary venous varix, 435

Ultmann JE, see Miller JB
Underwood PB Jr, see Seymour EQ

Valdivieso M, see Zornoza J
Vander Molen RL, see Conroy RM
Van Nagell JR Jr, see Donaldson E
Veronesi U, Spinelli P, Bonadonna G, Bajetta E, Beretta G, Tancini G: Laparoscopy and laparotomy in staging Hodgkin's and non-Hodgkin's lymphoma, 501
Vincent ME, see Robbins AH

Waag RC, see Gramiak R
Wallace S, Gianturco C, Anderson JH, Goldstein HM, Davis LJ, Bree RL: Therapeutic vascular occlusion utilizing steel coil technique: clinical applications, 381
Wallace S, see Zornoza J
Wallner PE, Brady LW Jr, Loughead J, Matsumoto T, Antoniades J, Prasasvinichai S, Glassburn JR, Asbell SO, Damsker JI: Subtotal mastectomy and radiation therapy in the definitive management of localized breast malignancy, 505
Walter JF, Paaso BT, Cannon WB: Successful transcatheter embolic control of massive hemotobilia secondary to liver biopsy (c), 847
Wandtke JC, Spitzer RM, Olsson HE, Welch E: Traumatic thenar ischemia, 569
Warnke RA, see Dunnick NR
Washburn RL, see Martel W
Waxman AD, Siemsen JK: Gallium scanning in cerebral and cranial infections, 309
Welch E, see Wandtke JC
Wellauer J, see Pouliadis GP
Wellman HN, see Yune HY
Weichselbaum RR, Epstein J, Little JB, Kornblith P: Inherent cellular radiosensitivity of human tumors of varying clinical curability, 1027
Weigensberg IJ: Preoperative radiation therapy in endometrial carcinoma: preliminary report of a clinical trial, 319
Weinberger MH, see Yune HY
Weinstein MA, Berlin Jr AJ, Duchesneau PM: High resolution computed tomography of the orbit with the Ohio nuclear delta head scanner, 175
Weinstein MA, see Conomy JP
Weiss A, see Roberson GH
Weiss ES, see Ter-Pogossian MM
Weisman SL, see Salama R
Wexler HA, Poole CA: Neonatal diaphragmatic dysfunction, 617
Whalen JP, see Wixson D
White AF, Baum S, Buranasiri S: Aneurysms secondary to pancreatitis, 393
White RI Jr, see Cavaluzzi JA
Whitehouse GH, see Borg SA
Wicks JD, see Martel W
Wilkinson RH: *Aseptic necrosis of bone* (b), 880
Williamson HO, see Seymour EQ
Willis KW, see Currarino G
Wills JS, see Han SS
Wilson CB, see Branan R
Wilson ES: Systemic to pulmonary venous communication in the superior vena caval syndrome, 247
Wilson JF, see Pierquin B
Wilson JS, Genant HK, Carlsson A, Murray WR: Patellar giant cell tumor (c), 856
Winchester P, see Kleinman PK
Witten DM, see Han SY
Wittenberg J, see Ferrucci JT Jr
Wixson D, Kazam E, Whalen JP: Displaced lateral surface of the liver (Hellmer's sign) secondary to an extraperitoneal fluid collection (c), 679
Wolff M, see Bachman D
Wood EG, see Donaldson E
Wooten P: Mammographic exposures at the breast cancer detection demonstration project screening centers, 531

Yoder IC, Pfister RC: Unilateral hemotocolpos and ipsilateral renal agenesis: report of two cases and review of the literature, 303
Yoshida Y, see Karasawa J
Yum MN, see Yune HY
Yune HY, Klatte EC, Grim CE, Weinberger MH, Donohue JP, Yum MN, Wellman HN: Radiology in primary hyperaldosteronism, 761

Zausner J, see Firooznia H
Zimmerman RA, Patel S, Bilaniuk LT: Demonstration of purulent bacterial intracranial infections by computed tomography, 155
Zornoza J, see Bancks N
Zornoza J, Goldman AM, Wallace S, Valdivieso M, Bodey GP: Radiologic features of gram-negative pneumonias in the neutropenic patient, 989
Zurschmeide DB: Paul F. Christenson, 1916–1976 (o), 870

Subject Index Volume 127

Index Key: a = abstract; b = book review; c = case report; e = editorial; l = letter; o = obituary; and t = technical note

Most radiologic subjects deal with disease conditions of a body part or region, and methods of diagnosis or treatment applicable to those parts. Accordingly, this index is primarily a list of anatomical parts, under which entries describing a disease or method are listed. Selected diseases are also indexed separately if they affect several body parts or are of frequent interest. Selected methods are likewise indexed separately. Specific applications are listed under the body part. Abstracts of literature, book reviews, and editorials are handled in the same manner. News items and books received are not indexed.

Abdomen, see also pelvis; under specific diseases and organs
  Calcified intraperitoneal metastases from ovarian carcinoma, 1003
  Displaced lateral surface of liver (Hellmer's sign) secondary to extraperitoneal fluid collections (c), 679
  Linear trauma (a), 705
  Mobile calcified appendix epiploica (c), 349
  Pneumoperitoneum, special features, 753
  Ultrasonographic anatomy in upper, major systemic veins and arteries, localization of pancreas (a), 705
  Venacavography, corticosteroids and surgery in idiopathic retroperitoneal fibrosis (a), 700
Accelerators, see therapeutic radiology
Achalasia, see stomach
Acinus, see lungs
Acrocephalosyndactyly, see bone; fingers; skull
ACTA scanner, see computed tomography
Acupuncture
  "New" foreign body in ear (c), 688
Addison's disease, see adrenals
Adenoma, see under individual organs and regions
Adrenals
  Primary hyperaldosteronism, 761
  Rim sign in hemorrhage, 289
Adriamycin
  Cardiotoxicity of adriamycin and daunomycin in children (a), 543
  Jejunum damage and recovery from x-ray and adriamycin exposure (a), 205
Agammaglobulinemia, see gamma globulins
Aganglionosis, see colon
Alzheimer's disease, see brain
Amebiasis
  Abscess of liver (a), 541
American College of Radiology
  Interim statement on breast cancer diagnosis, 711
American Roentgen Ray Society
  Instruction courses 1976, 207
Amyloidosis
  Intrathoracic manifestations (a), 1064
Anemia, sickle cell, see sickle cell disease
Aneurysm, see also under individual arteries; aorta; heart
  CT of aortic, 75
  CT in bleeding, 143
  Ruptured abdominal, 769
  Secondary to pancreatitis, 393
  Traumatic pseudoaneurysms (a), 360
  Tuberculous aortitis with mycotic (c), 859
Anger camera, see radionuclide imaging
Angina pectoris
  Ergotrate in coronary artery spasm (a), 701
  Spontaneously and pharmacologically provoked coronary arterial spasm in Prinzmetal variant (a), 1064
Angiocardiography, see coronary angiography
Angiography, see also other procedures, diseases, and organs
  Fundamentals of vascular radiology (b), 1072
  Optimal resources for chest and cardiovascular radiography (a), 361
Angiography, complications
  Paraspinal muscle infarction (a), 871
  Post procedure care of femoral puncture site (a), 361
  Systemic heparinization, 223
Angiography, technique
  Arteriographic evaluation of femoral bifurcation: value oblique projection, 955
  Balloon occlusion hepatic venography, 949
  Post procedure care of femoral puncture site (a), 361
  Priscoline augmented hepatic (a), 871
  Systemic heparinization in arteriography, 223
  Vasopressin control hemorrhage in chronic ulcerative colitis (c), 672
Angioma, see also individual organs
  Angiography of cerebral venous (a), 1067
  Hemangioblastoma of spinal cord (a), 1067
Ankle
  Closed treatment of fractures (a), 704
  Posttraumatic adhesive capsulitis, 585
  Tibiotalar slant in sickle cell anemia (a), 366
Anticoagulants, see blood
Antrum, see stomach
Aorta
  Aortoenteric fistulas, 235
  Hemodynamic assessment of obstructive aortoiliac disease, 559
  Ruptured abdominal aneurysm, angiography, 769
  Takayasu's arteritis and congenital coarctation, 227
  Tuberculous aortitis with mycotic aneurysm (c), 859
Appendix
  Mobile calcified epiploica (c), 349
Aqueduct of Sylvius, see brain
Aqueduct, vestibular, see ear
Atrium, see heart
Arachnoid, see also cisterns, subarachnoid; meninges
  CT of arachnoid cysts, 979
  CT of granulomatous basal arachnoiditis (a), 1068
  Granulations simulating osteolytic lesions (c), 523
Arnold-Chiari malformation, see brain
Arteries, see also angiography; thrombosis; under specific blood vessels, organs, and regions
  Adult arteriosclerotic moyamoya (a), 539
  Anterior inferior cerebellar in mass lesions (a), 875
  Arteriographic evaluation of femoral bifucation: value oblique projection, 955
  An atlas of normal vertebral angiograms (b), 710
  Bilateral persistent carotid-basilar anastomoses (c), 1053
  Bilateral subsclavian steal syndrome (c), 669
  Blood supply to acoustic neurinomas (a), 539
  Cystic degeneration of popliteal artery (c), 1043
  Extracranial angiographic findings in giant cell (temporal) arteritis, 957
  Frostbite, angiographic diagnosis and therapy (a), 871
  Hemorrhage from gastroesophageal junction (a), 536
  Review of 98 penetrating vascular injuries (a), 1064
  Scrotal "arteriocele" from iliac occlusion (c), 670
  Spinal cord vascularity, extraspinal sources of spinal cord arteries (a), 704
  Superior gluteal: artery at risk in blunt pelvic trauma (a), 702
  Therapeutic extra-intracranial anastomosis, clinical results (a), 539
  Uterine artery calcification, association with diabetes (a), 365
Arteriosclerosis, see also under specific blood vessels
  Hemodynamic assessment of obstructive aortoiliac disease, 559

Arteriovenous malformations
Pulmonary arteriovenous fistulas in children (a), 361
Pulmonary telangiectasia, 775
Arthritis, see also spine; under individual joints
Arthropathy in hemochromatosis (a), 537
Distal clavicle in rheumatoid arthritis (a), 874
Exfoliative interpretation of synovial fluid (a), 704
Gout-like lesions in rheumatoid arthritis (1), 1062
HL-A W27 in psoriatic arthropathy (a), 539
Radionuclide imaging of bones and joints of hand (a), 707
Sacroilitis in severe psoriasis, 579
Traite de radiodiagnostic XI. Rhumatologie, articulations, parties molles (b), 1074
Arthrography, see also under specific joints
For assessment of pain after total hip replacement (a), 538
Infrapatellar synovial fold: confusion in evaluation of anterior cruciate ligament, 589
Marking device for knee arthrography (t), 1057
Posttraumatic adhesive capsulitis of the ankle, 585
Astrocytoma, see brain, neoplasm; glioma
Atlas and axis, see also spine
Craniovertebral border, 281
Unilateral dysplasia of axis (c), 525
Atomic bomb and atomic energy, see radiation
Atrial septal defect, see heart
Auditory canal, see ear

Basal cell naevus syndrome, see bone
Bile ducts, see also gallbladder; cholangiography; accessory digestive organs
Diagnosis of choledochal cyst (c), 520
Duct insertion into duodenal diverticula (a), 873
Evaluation by gray scale ultrasound (a), 201
Introgenic rupture of intrahepatic (a), 536
Nonoperative extraction of retained common duct stones (a), 873
Selective catheterization of, 409
Strictures, diagnosis and treatment (a), 362
Biopsies, see also under specific organs
Biopsies, complications
Hemobilia following needle biopsy of liver (c), 1035
Of liver, revealed by angiography (a), 872
Bladder, see also urinary tract; urography
Carcinoma of urachus (c), 351
Carcinoma of urinary bladder, radiation therapy (a), 203
Crohn's disease of bladder, 297
Blastoma
Pulmonary (c), 1048
Bleomycin
Enhanced pulmonary toxicity with bleomycin and radiotherapy in oat cell lung cancer (a), 877
Low dose bleomycin and methotrexate in cervical cancer (a), 543
Blood, coagulation
Healing of deep venous thrombosis, heparin vs. streptokinase, 553
Bone, see also under individual bones and diseases
Aseptic necrosis of bone (b), 880
Assessment of skeletal maturity and prediction of adult height (TW2) Method (b), 881
Basal cell naevus syndrome (a), 540
Bone marrow irradiation with ^{52}Fe in lymphoma (a), 543
Bone mineral content using CT scanning, 593
Effects of radiation therapy on growing long bones, 935
Periostitis and pseudoperiostitis (a), 538
Postirradiation atrophy of (a), 366
Bone, infection
Acquired syphilis (c), 789
Osteomyelitis, bone and blood pool imaging (a), 542
Osteomyelitis and pulmonary sepsis (a), 365
Bone, metabolic abnormalities
Bone disease in long-term maemodialysis, (a) 703
Resorption in renal osteodystrophy (a), 537
Subchondral resorption in renal osteodystrophy (a), 538
Bone, neoplasm
Detection of skeletal metastases (a), 537
Metaphyseal chondroblastoma (c), 686
Palliation of metastases with irradiation (a), 542
Bone, radionuclide studies
Comparison of fluoride and technetium polyphospate (a), 540
Osteomyelitis, bone and blood pool imaging (a), 542
Unified approach to detection of skeletal metastases (a), 537
Book reviews
Advances in chemical radiosensitization (b), 879
Angiography of posterior fossa tumors (b), 710
Aseptic necrosis of bone (b), 880
Assessment of skeletal maturity and prediction of adult height (TW2) method (b), 881
An atlas of normal vertebral angiograms (b), 710
Cancer of head and neck, (b), 881
Cancer therapy abstracts (b), 880
Chronic lung obstruction in lung disease (b), 1071
Clinical applications of electron beam (b), 1074
Diagnostic nuclear medicine (b), 1073
Flash radiography (b), 1073
Fundamentals of abdominal and pelvic ultrasonography (b), 544
Fundamentals of radiology (b), 545
Fundamentals of vascular radiology (b), 1072
Gynecologic oncology (b), 879
International histological classification of tumours no. 13: histological typing of female genital tract tumours (b), 881
Introductory physics of nuclear medicine (b), 1072
M-mode echocardiographic techniques and pattern recognition (b), 545
Natural background radiation in the United States (b), 882
Oral roentgenographic diagnosis, 4th ed. (b), 882
Panoramic dental radiography (b), 1074
Practical approaches to pediatric radiology (b), 883
Radiographic anatomy of the coronary arteries: an atlas (b), 1071
Radioimmunoassay (b), 544
Radiology of orbit (b), 544
Radiology of small intestine (b), 879
Radionuclide studies of genitourinary system (b), 880
Special procedures in chest radiology (b), 884
Synopsis of analysis of roentgen signs in general radiology (b), 1073
Traite de radiodiagnostic XI. Rhumatologie, articulations, parties molles (b), 1074
Tumors of kidney, renal pelvis, and ureter (b), 880
Ultrasonics in medicine (b), 710
Wilms' tumor (b), 544
Bowel, see colon; intestine; gastrointestinal tract
Brachytherapy, see therapeutic radiology
Bradykinin
Effects on portal vein, clinical (a), 361
Effects on portal vein, experimental (a), 361
Brain, see also arteries; computed tomography, cranial; cerebral angiography; cisterns, subarachnoid; meninges; sella turcica
CT in intracranial infections, 155
CT in progressive multifocal leukoencephalopathy (c), 663
Extensive central nervous system calcification (c), 665
Intraventricular administration of oil-soluble contrast media (a), 875
Shift of intraventricular blood clots CT (a), 540
Therapeutic extra-intracranial anastomosis (a), 539
Brain cysts, see computed tomography, cranial
Brain, infarction
CT of (a), 539

Brain, infarction—*continued*
CT and radionuclide scans in stroke, 481
Experimental cerebral infarction in monkey (a), 1067
Gallium-67 (a), 202
Brain, neoplasm
Angiography of cerebral venous angioma (a), 1067
Angiography of posterior fossa tumors (b), 710
Blood supply to acoustic neurinomas (a), 539
Craniopharyngiomas (a), 707; (a), 876
CT of extra-axial posterior fossa masses (a), 1067
CT in meningiomas, 139
CT in pediatric brain tumors, 129
Intracranial chondromas, 973
Neutron therapy of glioblastoma, 331
Why do gliomas not metastasize? (a), 540
Brain, radionuclide imaging
Comparison of CT and brain scans, 171
CT and radionuclide brain scans in stroke, 481
Gallium scanning in cerebral infections, 309
Breast, see also mammography
ACR interim statement on breast cancer diagnosis, 711
Calcifications, radiology and pathology (a), 200
Calcifications, ultrastructural study (a), 540
Breast, neoplasm, diagnosis
"Cold" breast cancer, thermography, 793
Detection, review and recommendations (a), 200
Localization of lesions, 253
Mammography of irradiated breast (a), 204
Screening, benefit and risk (a), 1068
Breast, neoplasm, therapy
Collimative devices, ^{60}Co teletherapy, dosimetric considerations, 649
Collimating devices, skin dose, 653
Inoperable cancer treated by radiotherapy and subsequent radical mastectomy (a), 542
Localized mastectomy and radiotherapy in localized neplasm, 505
Locally recurrent carcinoma (a), 1069
Radiation therapy, 645
Subclavian artery occlusion following irradiation (a), 203
Bursa, see specific joints

Calcification, see specific diseases, organs, and regions
Cancer, see neoplasms; therapeutic radiology; radiobiology; under organs, regions, and individual neoplasms
Carcinoembryonic antigen (CEA)
In carcinoma of cervix, 829
Monitoring of radiation therapy for colorectal cancer, 641
Carpus, see wrist
Cathartics, see colon
Cauda equina, see spinal cord
Cavography, see venae cavae
Cecum, see colon
Cephalhematoma, see skull
Cephalometry, see skull
Cerebellopontine angle, see brain
Cerebral angiography, see also brain; brain neoplasm; and under specific blood vessels
Anterior inferior cerebellar artery in mass lesions (a), 875
Subdural empyema (a), 539
Cerebral blood vessels, see brain; cerebral angiography; arteriovenous malformations; and under specific blood vessels
Cervix, see uterus
Chamberlain, Richard Hall (o), 358
Chemotherapy, see also under individual drugs
Cardiotoxicity of adriamycin and daunomycin in children (a), 543
Low dose bleomycin and methotrexate in cervical cancer (a), 543
Cholangiography, see also bile ducts; gallbladder
Bile duct strictures, diagnosis and treatment (a), 362
Fine needle transhepatic for obstruction jaundice, 403
Intravenous, study of optimum dose of iodipamide (a), 362
Introgenic rupture of intrahepatic bile ducts (a), 536
Meglumine iodoxamate (cholovue) and meglumine iodipamide (cholografin) compared, 257
Portal vein visualization during intravenous (a), 1065
Selective catheterization of common bile duct, 409
Treatment of impacted sediment in T tube, 413
Cholecystography, see also cholangiography; gallbladder
Acalculous cholecystitis, diagnosis (a), 364
Cholecystokinetic with sincalide, 267
Choledochal cyst, see bile ducts
Cholografin, see cholangiography; iodipamide and iodoxamate
Chondroma
Intracranial, 973
Chondroblastoma, see bone
Chondromalacia
Patellae (a), 366
Chondromatosis
Arthrography in knee (c), 344
Osteochondromatosis of elbow (c), 347
Chordoma
20 cases, 797
Choroid plexus, see brain
Christensen, Paul F. (o), 870
Cisterns, subarachnoid
Cisternography with metrizanide and tomography, 957
Clavicle
Distal in rheumatoid arthritis (a), 874
Posttraumatic osteolysis of, 781
Colitis
Early diagnosis of necrotizing enterocolitis, 629
Endoscopy and radiography (a), 362
Hemolytic uremia syndrome (a), 364
Pseudomembranous, plain-films (a), 363
Vasopressin control hemorrhage in chronic ulcerative (c), 672
Collimators, see radiography
Colon, see also gastrointestinal tract; colitis
Air contrast examination of colostomies, 607
Carcinoembryonic antigen monitoring of radiation therapy for colorectal cancer, 641
Cavernous hemangioma in Klippel-Trenaunay syndrome (a), 363
Colonic diseases, value plain-film left lateral view (a), 873
Double tracking in sigmoid (a), 1065
Effects of water soluble contrast media (a), 363
Electrical anal sphincter control in barium enema, 429
Enlargement of ileocecal valve due to lymphoid hyperplasia (c), 518
Herpes zoster, 273
Ingested foreign bodies simulating polyposis (c), 1040
Lymphoid hyperplasia of colon and dysgammaglobulinemia (c), 515
Malposition of, in left renal agenesis and ectopia (a), 1065
Pathogenesis bleeding colonic diverticulosis, 901
Pseudoobstruction in ceroidosis, 277
Volvulus of, treatment by colonoscopy (a), 364
Colonoscopy, see endoscopy
Computed tomography
Bone mineral content, 593
Challenge of (e), 1
Computed body tomography and cancer (e), 1061
Health planning, 187
Economics of, 191
Orientation of images (e), 199
Computed tomography, abdominal
Aortic aneurysms, 75
Early application at Mallinckrodt, 53
EMI prototype, initial trial at Mayo, 23 (erratum, 691)

Computed tomography, abdominal—*continued*
Liver, 69
Computed tomography, cranial
Arachnoid cysts, 979
Bleeding aneurysms, 143
Brain infarcts (a), 539
Comparison with brain scans, 171
Comparison with radionuclide brain scans in stroke, 481
Contrast enhancement in intracerebral hemorrhage (c), 1050
Evaluation of posterior third ventricle (a), 1066
Extra-axial posterior fossa masses (a), 1067
Granulomatous basal arachnoiditis (a), 1068
Intracranial infections, 155
Limitations of, 111
Meningiomas, 139
Neuroradiology, 101
Pediatric brain tumors, 129
Progressive multifocal leukoencephalopathy (c), 663
Trends in, 125
Computed tomography, orbital
Graves' ophthalmopathy (a), 539
With Delta scanner, 175
Computed tomography, technique
Effect of kVp level on EMI values (a), 877
Effects of motion on resolution, 11
Longitudinal scan (t), 1059
Picture processing, 17
Picture quality, 3
In radiation therapy planning, 179
Stereotaxic, 167
Trends in brain, 125
Computed tomography, thoracic
Aortic aneurysms, 75
Early application at Mallinckrodt, 53
Initial trial of EMI prototype at Mayo, 23 (erratum, 691)
Heart, 79
Shift of intraventricular blood clots (a), 540
Computers
Computerized radiological reporting (a), 200
RAPORT radiology system, clinical trials, 811
Contrast media, see also individual medium
Antibodies to contrast agents (a), 360
Effects of intracoronary and intraventricular injections (a), 1064
Effects on water soluble media on colon (a), 363
Coronary angiography
Acute myocardial infarction and angiographically normal coronary arteries (a), 702
Effects of intracoronary and intraventricular injections of contrast medium (a), 1064
Ergotrate in coronary artery spasm (a), 701
Interobserver variability (a), 702
Spontaneously and pharmacologically provoked coronary arterial spasm in Prinzmetal variant angina (a), 1064
Coronary arteries
Radiographic anatomy of the coronary arteries: an atlas (b), 1071
Atherosclerosis of left main (a), 872
Corpus callosum, see brain
Cost analysis, see economics
Cowper's duct, see urethra
Craniopharyngioma, see brain, neoplasm
Crohn's disease, see intestine
Cystography, see bladder
Cystourethrography, see also bladder; urethra
Autonomic dysreflexia in cystourethrography and ileal loopography, 293
Cysts, see under organs and regions
Cytomegalic inclusion disease
Extensive central nervous system calcification due to cytomegalovirus infection, 665

Dacryocystography, see lacrimal gland
Daunomycin
Cardiotoxicity of adriamycin and, in children (a), 543
Deafness, see ear
Delta scanner, see computed tomography
Diphosphonate, see under organs and regions scanned
Diaphragm
Neonatal dysfunction, 617
Diverticulitis, see colon
Doppler ultrasound, see ultrasound
Dosimetry
Collimating devices for breast cancer ^{60}CO teletherapy, dosimetric considerations 649
Collimating devices for breast cancer teletherapy, dose to the skin, 653
Natural background radiation in the United States (b), 882
Down's syndrome
Intraluminal duodenal diverticulum in trisomy 21 (c), 677
Drugs, abuse
Balloon obturation bowel obstruction, drug smuggling (c), 1033
Ductus arteriosus, see heart, abnormalities
Duodenum, see also gastrointestinal tract; intestine; peptic ulcer
Flexural pseudolesions of (a), 1065
Hypotonic duodenography with glucagon (a), 363
Intraluminal duodenal diverticulum in trisomy 21 (c), 677
Postbulbar ulceration (a), 536
Seat belt induced injury (a), 1065
Dura mater, see meninges

Ear
Acupuncture needles in (c), 688
Echinococcosis, see under organs and regions
Echocardiography, see heart
Economics, medical
Unified approach to detection of skeletal metastases (a), 537
Economics of CT, 191
Editorials
Challenge of CT (e), 1
Computed body tomography and cancer (e), 1061
Echocardiography, territorial imperative? (e), 534
General radiologist and ultrasound (e), 867
"If you are pregnant, or if you think you might be..." (e), 696
Orientation of CT images (e), 199
Technological imperative (e), 356
Education
ARRS instruction courses 1976, 207
Dissent of an eclectic (l), 1062
Effusion, see under region
Elbow
Osteochondromatosis of (c), 347
Electron beam therapy, see therapeutic radiology
Electronic imaging, see radiology; radiography
Embolism, see also thrombosis
Effects of experimental hepatic artery embolization on hepatic function, 563
Embolic control of massive hematobilia, 847
Embolic control of renovascular hypertension, 389
Embolization of spleen for control of hemorrhage and *in situ* splenectomy (a), 1064
Paradoxial detection during life (a), 701
Pulmonary artery neoplasm mimicking pulmonary embolism (a), 359
Steel coil vascular occlusion for therapy, 381
Therapeutic bilateral renal infarction (a), 537
Value of lung scan (a), 706
Emphysema
Chronic lung obstruction in lung disease (b), 1071
EMI scanner, see computed tomography
Encephalography, see brain

Endoscopy
Accuracy of radiological and endoscopic diagnosis of carcinoma of stomach (a), 703
Accuracy of retrograde cholangiopancreatography in pancreatic carcinoma (a), 873
Endoscopic pancreatogram, normal (a), 363
Endoscopy and radiography in colitis (a), 362
Gastrointestinal in cancer patients (a), 204
Lung cancer diagnosis (a), 204
Renal cysts (a), 365
Volvulus of colon, treatment by colonoscopy (a), 364
Enteritis, see intestine
Enterocolitis, see colon; intestine
Ependymoma, see brain, neoplasm
Epidermoids, see skull
Esophagus, see also stomach
Accuracy of esophagograms in detecting small esophageal carcinoma, 909
Esophageal aperistalsis secondary to metastatic invasion of myenteric plexus (c), 862
Mediastinal and pulmonary complications of sclerosing treatment of esophageal varices (a), 702
Extremities, see also fingers; hand; and under individual bones and joints

Face, fractures
Orbital floor eruption (a), 705
X-ray technique, 473
Falx cerebri, see meninges
Femur
Traumatic dislocation of hip joint with fracture of shaft of femur on same side (a), 704
Fetus, see also pregnancy; radiation, injurious effects; radiobiology
Placental thickness related to fetal development (a), 541
Fibrosis, see organs and regions
Fingers, see also hand
Traumatic thenar ischemia, 569
Fistula, see also organs
Aortoenteric, 235
Fontanelle, see skull
Foot
Lisfranc's tarsometatarsal fracture-dislocation (a), 1066
Talo-calcaneal coalition (a), 538
Fossa, pituitary, see sella turcica
Fractionation, see dosimetry; radiobiology; therapeutic radiology
Fractures, see under individual bones
Frostbite
Angiographic diagnosis and therapy (a), 871

Gallbladder, see also bile ducts; cholecystography
Aberrant, 417
Acalculous cholecystitis (a), 364
Cholecystosonography, gray scale, 817
Gallium, radioactive
In cerebral infarction (a), 202
In cerebral infections, 309
In pulmonary disease (a), 541
Gamma globulins
Lymphoid hyperplasia of colon and dysgammaglobulinemia (c), 515
Gastrografin
Hemorrhage due to (a), 536
Gastrointestinal tract
Balloon obturation bowel obstruction, drug smuggling (c), 1033
Complications of jejunoileal bypass surgery, 737
Complications of therapeutic irradiation (a), 543
Endoscopy in cancer patients (a), 204
Hemorrhage due to gastrografin (a), 536
Idiopathic intestinal pseudoobstruction, 729
Necrotizing enterocolitis in infants after open heart surgery, 757
Perforation without intraperitoneal air-fluid level, 915
Substrate-coated barium sulfate tablets in evaluating digestive enzyme deficiency (a), 1065
Gelfoam, see embolism
Genitourinary tract, see urinary tract; urography; and individual organs
Giant cell tumor
Malignant of soft tissue (a), 1066
Ossified pulmonary metastases from bone (c), 1046
Of patella (c), 856
Glioblastoma, see brain, neoplasm
Glioma
Why do gliomas not metastasize? (a), 540
Glucagon
Hypotonic duodenography (a), 363
Oviduct response (a), 874
Pancreatographic effect (a), 702
Goiter, see thyroid
Gonadoblastoma, see ovary
Granuloma
Pseudocavitary of lung, 251
Grave's disease, see thyroid
Gynecology, see ovary; pregnancy; uterus

Hand, see also fingers
Poland's syndrome (a), 366
Radionuclide imaging of bones and joints (a), 707
Heart, see also arteries; coronary angiography; coronary arteries; embolism
Acute myocardial infarction and angiographically normal coronary arteries (a), 702
CT of, 79
Diseases of yesteryear and mitral valve prolapse (a), 872
Intervention ventriculography, comparative value of nitroglycerin, post-extrasystolic potentitation (a), 700
Interventricular septum in obstructive lesions of left ventricular outflow tract, 573
Myocardial imaging with technetium stannous pyrophosphate (a), 872
Myocardial lesions of progressive systemic sclerosis (a), 701
Necrotizing enterocolitis in infants after open heart surgery, 757
Vasodilator therapy for left ventricular failure (a), 361
Videodensitometry of ventricular wall motion (a), 361
Visualization of left ventricular aneurysm (l), 868
Heart, abnormalities
Absent mesosternum in congenital heart disease, 923
Cardiac malposition and heterotaxy syndrome using ^{99m}Tc sulfur colloid imaging, 1021
Common or single ventricle study (a), 701
Hemodynamic studies in children after Mustard operation (a), 701
Postoperative after Mustard atrial baffle repair (a), 702
Right ventricular growth after repair of pulmonary stenosis (a), 360
Ventilation-perfusion abnormality after repair of tetralogy of Fallot (a), 360
Heart, ultrasound
Cardiac imaging with ultrasound and CT, 91
Echocardiography in discrete subaortic stenosis (a), 536
Echocardiography, territorial imperative? (e), 534
Mitral valve prolapse in 100 presumably healthy young females (a), 706
M-mode echocardiographic techniques and pattern recognition (b), 545
Resolution problems in echocardiology (a), 705

Hemochromatosis
Arthropathy in (a), 537
Hemolytic-uremic syndrome
Colitis in (a), 364
Hemorrhage, see under disease, organs, and systems
Hepatoma, see liver
Herpes
Zoster of colon, 273
Hip
Arthrography for assessment of pain after total hip replacement (a), 538
Total hip replacement in patients with ankylosing spondylitis (a), 875
Traumatic dislocation of hip joint with fracture of shaft of femur on same side (a), 704
Hodgkin's disease, see also lymphoma
Involved field radiation therapy for early state in children (a), 707
Intrathoracic disease in untreated and non-Hodgkin's lymphoma (a), 1064
Mantel irradiation (a), 1069
Pediatric (a), 876
Radiotherapy (a), 203
Radiotherapy in stage I and II, 833
Reproductive and endocrine function (a), 707
Split-course radiotherapy (a), 707
Hyperinsulinism, see pancreas
Hyperparathyroidism, see parathyroid
Hypertension, see also specific organs
Primary hyperaldosteronism, 761
Hypothalamus, see brain
Hypotonic duodenography, see duodenum
Hysterography, see uterus
Hysterosalpingography, see uterus

Ileocecal valve, see colon
Ileum, see intestine
Imaging, see radiographs; radiography; radionuclide imaging
Immunology, see also gamma globulins; radioimmunoassay; therapeutic radiology
Antibodies to radiographic contrast agents (a), 360
Transformation delay of lymphocytes in radiation therapy, 337
Instruction, see education
Intervertebral disc, see spine
Intestine, see also appendix; duodenum; gastrointestinal tract
Alpha-chain disease (a), 362
Crohn's disease of bladder, 297
Enlargement of small bowel fold, pathophysiology, 423
Iodiopathic pseudoobstruction, 729
Radiation injury of small intestine (a), 364
Radiology of small intestine (b), 879
Small bowel enema, 743
Intubation
Endotracheal tube position, 433
Pleural effusion due to nasopharyngeal (c), 341
Iodipamide and iodoxamate
Excretion; role of serum albumin (a), 363
Intravenous cholangiography, optimum dose of iodipamide (a), 362
Meglumine iodoxamate (cholovue) and meglumine iodipamide (cholografin) compared, 257
Saturation kinetics and choleretic effects of iodoxamate and iodipamide (a), 873
Iopanoate
Kinetics (a), 363
Islands of Langerhans, see pancreas

Jaundice
Fine needle transhepatic cholangiography for obstructive, 403
Portal hypertension in obstructive (a), 361
Treatment of impacted sediment in T tube, 413
Jaws
Oral roentgenographic diagnosis, 4th ed. (b), 882
Keeffe, Eugene J. (o), 870
Keloids, see skin
Kidney, see also urinary tract; urography; renal angiography
Autonomous secondary hyperparathyroidism, 377
"Central" lucency of pseudotumor (a), 703
Comparative evaluation of transplant rejection with radioiodinated fibrinogen, ^{99m}Tc-sulfur colloid and ^{67}Ga-citrate (a), 706
Compensatory renal enlargement in adults, 713
Genitourinary involvement in chronic granulomatous disease of childhood (c), 683
Hematocolpos and renal agenesis, 303
Loss of renal tissue in elderly (a), 703
^{99m}Tc-sulfur colloid in renal transplant complications (a), 706
Papillary necrosis in kidney transplant patients (a), 874
Sonographic-radiographic correlation of renal and perirenal infections, 1007
Therapeutic bilateral infarction (a), 537
Kidney, cysts
Angiography and ultrasound in infected renal cysts, 1015
Endoscopy of renal cysts (a), 365
Pancreatic pseudocysts presenting as renal cysts (a), 537
Perirenal pseudocyst (a), 365
Kidney, neoplasm
Benign renal oxyphilic adenoma, angiography, 717
Janeway lecture: Pediatric cancer treatment, model for oncology, 891
Pyelocancerous backflow in malignancy (a), 537
Wilms' tumor (b), 544
Kidney, transplantation
Comparative evaluation of renal transplant rejection with radioiodinated fibrinogen, ^{99m}Tc-sulfur colloid and ^{67}Ga-citrate (a), 706
Evaluation by magnification angiography (a), 872
Evaluation by ultrasound (a), 202
^{99m}Tc-sulfur colloid in transplant complications (a), 706
Papillary necrosis (a), 874
Kidney, ultrasound
Angiography and ultrasound in infected renal cysts, 1015
Anterior position of lower pole of right kidney (a), 1068
Sonographic-radiographic correlation of renal and perirenal infections, 1007
Klippel-Trenaunay syndrome
Cavernous hemangioma of colon in (a), 363
Knee, see also semilunar cartilages
Arthrography in chondromatosis (c), 344
Classification of ligament instabilities (a), 874
Classification of ligament instabilities, lateral compartment (a), 874
Congenital dislocation, 465
Infrapatellar synovial fold: confusion in evaluation of anterior cruciate ligament, 589
Ossicle of meniscus, 785
Protheses, 447
Tension studies of ligaments (a), 704
Tomography in fractures of tibial plateau (a), 1066
Lacrimal gland
Dacryocystography, radiographic and radionuclide compared (a), 541
Larsen's syndrome, see bone; face; joints
Leiomyoma
Uterine leiomyomas with lung metastases, 441
Letters
Dissent of an eclectic, 1062
Gout-like lesions in rheumatoid arthritis, 1062
Heard in Philadelphia, 869
Radiation oncology: is there a better name? 868
Visualization of left ventricular aneurysms, 868

Leukemia
Acute lymphoblastic (a), 542
Central nervous system irradiation of children with (a), 877
Total body irradiation of chronic lymphocytic (a), 1069
Liposarcoma, see organs
Liver, see also bile ducts; blood
Amebic abscess, radionuclide scanning (a), 541
Balloon occlusion hepatic venography, 949
Biopsy, complications, revealed by angiography (a), 872
CT of, 69
Effects of experimental hepatic artery embolization on hepatic fuction, 563
Embolic control of massive hematobilia, 847
Gray scale ultrasonic investigation defects on ^{99m}Tc-sulfur colloid scanning (a), 705
Hemobilia following needle biopsy (c), 1035
Hepatic angiosarcoma in vinyl chloride workers, angiography scans (a), 362
Hepatic lymphatics opacified by intrahepatic injection of contrast medium (a), 1065
New diagnostic horizons with sonar (a), 705
Priscoline augmented hepatic angiography (a), 871
Systemic-portal venous shunting causing liver scan "hot spot" in superior vena caval obstruction, 637
Treatment of hepatic cyst with pantopaque, 850
Ultrasonic anatomy in upper abdomen, portal and hepatic venous anatomy (a), 705
Lungs, see also pleura; respiratory distress syndrome
Cancer diagnosis by endoscopy (a), 204
Chronic lung obstruction in lung disease (b), 1071
Distribution of inhaled radioaerosol in obstructive pulmonary disease (a), 706
Endotracheal tube position, evaluation, 433
Gram-negative pneumonias in neutropenia, 989
Mushroom worker's lung disease (a), 359
Osteomyelitis and pulmonary sepsis (a), 365
Pulmonary arteriovenous fistulas in children (a), 361
Pulmonary telangiectasia, 775
Pulmonary venous varix, 435
Swyer-James (Macleod's) syndrome (a), 359
Uterine leiomyomas with lung metastases, 441
Value of lung scan in evaluating young patients with pleuritic chest pain (a), 706
Ventilation-perfusion abnormality after repair of tetralogy of Fallot (a), 360
Xerotomography of peripheral lesions (a), 700
Lungs, cavitation
Cavitary pulmonary nodules in lupus (a), 359
Pneumatoceles, traumatic (a), 871
Pseudocavitary granulomas, 251
Lungs, diseases
Gallium scanning in pulmonary disease (a), 541
Intrathoracic manifestation of amyloid disease (a), 1064
Pneumatoceles, traumatic (a), 871
Lungs, edema
Pulmonary edema in acute pancreatitis (a), 359
Salicylate-induced pulmonary edema (c), 865
Septal lines in right heart failure (a), 700
Lungs, neoplasm
Enhanced pulmonary toxicity with bleomycin and radiotherapy in oat cell lung cancer (a), 877
Ossified pulmonary metastases from giant cell tumor of bone (c), 1046
Pseudomesotheliomatous carcinoma (a), 536
Pulmonary artery neoplasm mimicking pulmonary embolism (a), 359
Pulmonary blastoma (c), 1048
Videodensitometry in lung carcinoma (a), 359
Lupus erythematosis
Cavitary pulmonary nodules (a), 359
Mixed connective tissue disease and scleroderma-systemic (a), 1068
Lymph nodes, see also Hodgkin's disease; lymphography; lymphoma
Anterior mediastinal lymphadenophy in sarcoidosis, 983
Fast neutron teletherapy of metastatic cervical adenopathy (a), 1069
Internal mammary lymphoscintigraphy (a), 202
Lymphography
Hepatic lymphatics opacified by intrahepatic injection of contrast medium (a), 1065
Thoracic duct variation and lymph node visualization (a), 200
Lymphoma, see also Hodgkin's disease
Laparoscopy and lapartomy in staging, 501
Manifestations of malignant histiocytosis, 611
Lymphoma, non-Hodgkin's
Bone marrow involvement in (a), 707
In childhood (a), 203
Intrathoracic disease in untreated Hodgkin's disease and non-Hodgkin's lymphoma (a), 1064
Of stage III extent (a), 1069
Staging, pathology (a), 204

Macroradiography, see radiography
Mammography, see also breast, neoplasm
Breast calcifications (a), 200
Breast cancer detection (a), 200
Breast cancer screening (a), 1068
Image quality, spectral effects of molybdenum and tungsten target (a), 204
Irradiated breast (a), 204
Localization of breast lesions, 253
Mammographic exposures in breast cancer detection centers, 531
Mediastinum
Germ cell tumor (a), 871
Mediastinal parathyroid adenoma, 243
Medulla oblongata, see brain
Medullary sponge kidney, see kidney
Megacolon, see colon
Megalencephaly, see brain
Meglumine iodipamide, see iodipamide and iodoxamate
Melanoma
Lymph node metastases and level of invasion in primary (a), 204
Malignant, surgical treatment (a), 203
Meninges, see also arachnoid
Subdural empyema, angiography (a), 539
Meningioma, see brain
Meningomyelocele
Syringohydromyelia and (a), 1068
Menisci, see semilunar cartilages; knee
Metaphyses, see bone
Metrizamide
Cisternography with tomography and, 965
In experimental urography v. renal excretion in rabbit and cat (a), 1066
Intrathecal tolerance (a), 1067
Microangiography, see angiography
Mitral valve
Diseases of yesteryear and mitral valve prolapse (a), 872
Prolapse in 100 presumably healthy young females (a), 706
Mongolism, see Down's syndrome
Moyamoya disease, see arteries
Mucocele
Sphenoethmoidal, 595
Mucolipidosis, see bone
Mucopolysaccharidosis, see bone
Mushroom worker's disease
Lung disease (a), 359

Myelography, technique
Spinal needle with depth guide (t), 354
Myelomeningocele, see spinal cord
Myelopathy, see spinal cord
Myocardium, see heart
Myoglobinuria, see kidney

Navicular bone, see wrist
Necrotizing enterocolitis, see colitis
Neoplasm, see also radiobiology; therapeutic radiology; under organs, regions, and individual neoplasms
Cancer of head and neck (b), 881
Cellular radiosensitivity of human tumors, 1027
Cure of solid tumor by microwaves and x-ray (a), 205
Enhancement of radiation response in murine mammary carcinoma by nitrofuran derivaties (a), 205
Fast neutron radiotherapy for locally advanced pelvic cancer (a), 1069
Fast neutron teletherapy of metastatic cervical adenopathy (a), 1069
Janeway lecture: pediatric cancer treatment: model for oncology, 891
Sensitization of C3H mouse mammary tumors to fractionated radiation (a), 206
Neuroradiology, see brain; cerebral angiography; nervous system; radiology; spinal cord
Neutrons
Radiotherapy for locally advanced pelvic cancer (a), 1069
Radiotherapy of metastatic cervical adenopathy (a), 1069
Therapy of glioblastoma, 331
Nervous system
Extensive central calcification due to cytomegalovirus infection (c), 665
Tumors of lower thoracic sympathetic chain (a), 703
Nuclear medicine, see also radionuclide imaging; radionuclides; and under diseases, organs, and regions
Diagnostic nuclear medicine (b), 1073
Introductory physics of nuclear medicine (b), 1072
Nuclides, see radionuclides; and under individual radionuclides

Obituaries
Chamberlain, Richard Hall, 358
Christensen, Paul F., 870
Keeffe, Eugene J., 870
Ranniger, Klaus, 699
Williams, A. Justin, 535
Observer performance, see radiographs; radiography
Obstetrics, see pregnancy; uterus
Occlusion, see thrombosis; embolism
Oculoauriculovertebral syndrome, see ear; spine
Oligodendroglioma, see glioma
Orbit
CT of with Delta scanner, 175
Radiology of orbit (b), 544
Ossicles, auditory, see ear
Osteoarthritis, see arthritis; under names of bones and joints
Osteoarthropathy, hypertrophic pulmonary
Radionuclide imaging (a), 1068
Osteodystrophy, see bone, metabolic abnormalities
Osteomyelitis, see bone
Osteotomy, see bone
Ostium primum defect, see heart, abnormalities
Otolaryngology, see ear
Ovary
Calcified intraperitoneal metastases from ovarian carcinoma, 1003
Gonadoblastoma: ovarian tumor with characteristic calcifications, 1001
Gynecologic oncology (b), 879

Oxygen
Treatment of radiation necrosis with hyperbaric (a), 1068
Pantopaque
Intraventricular administration of oil-soluble contrast media (a), 875
Papillary necrosis, see kidney
Pacemakers, see heart
Pancreas
Accuracy of retrograde cholangiopancreatography (ERCP) in carcinoma (a), 873
Angiographic demonstration of a "vipoma" (c), 1037
Ascites due to duct diseases (a), 873
Biliary and pancreatic duct insertion into duodenal diverticulum (a), 873
Effect of glaucagon (a), 702
Endoscopic pancreatogram (a), 363
Pancreatic vein radioimmunoassay in glucagon-secreting carcinoma (a), 1064
Pseudocysts presenting as renal cysts (a), 537
Ultrasonography in pseudocysts, 315
Use of substrate-coated barium sulfate tablets in evaluating digestive enzyme deficiency (a), 1065
WDHA syndrome, radiology, pathology, 397
Pancreatitis
Aneurysms secondary to, 393
Gastrocolic space in acute (a), 364
Pulmonary edema in acute (a), 359
Paraganglioma, see glioma
Parathyroid
Angiography of tumors (a), 360
Autonomous secondary hyperparathyroidism, 377
Mediastinal adenoma, 243
Tumors, ultrasonography (a), 201
Parietal bone, see skull
Parotid gland
Ultrasound (a), 202
Patella, see also knee
Chondromalasia patellae (a), 366
Giant cell tumor of (c), 856
Pediatric radiology, see specific procedures and diseases
Pelvis, see also specific pelvic bones and organs
Parametrial calcification after radioactive gold treatment of cervical carcinoma, 511
Superior gluteal: artery at risk in blunt pelvic trauma (a), 702
Peptic ulcer
Postbulbar ulceration of duodenum (a), 536
Periostitis, see bone
Phlebography, see individual organs and procedures
Phocomelia, see fingers; other extremities
Placenta
Aging by gray sickle echography (a), 201
Thickness related to fetal development, ultrasound (a), 541
Platyspondyly, see spine
Pleura
Effusion due to nasopharyngeal intubation (c), 341
Effusion, infrapulmonary (a), 871
Medial pneumothorax (a), 871
Two lesser known signs of neonatal pneumothorax, 623
Pneumatosis intestinalis, see intestine
Pneumoencephalography, see brain
Pneumoperitoneum
Gastrointestinal perforation without intraperitoneal air-fluid level, 915
Special features, 753
Pneumothorax, see also pleura
Two lesser known signs of neonatal pneumothorax, 623
Polydactyly, see bone
Polyphosphate, see under organs and regions scanned
Poland's syndrome
Review of 43 cases (a), 366

Porencephaly, see brain
Portal vein
Bradykinin effects on portal vein (a), 361
Hypertension in obstructive jaundice (a), 361
Visualization, intravenous cholangiography (c), 1065
Pregnancy, see also fetus; placenta; radiations, injurious effects; radiobiology
"If you are pregnant, or if you think you might be..." (e), 696
Prune belly syndrome, see abdomen; urinary tract
Pseudolymphoma, see also lymphoma
Lymphoreticular hyperplasia of stomach, 261
Pulmonary arteries, see also embolism; thrombosis
Neoplasm mimicking embolism (a), 359
Pseudotruncus arteriosus, see heart, abnormalities
Pulseless disease, see Takayasu's arteritis
Pyelography, see urography
Pylorus, see stomach

Radiation, injurious effects
Collagen content of mouse lung after irradiation (a), 206
Damage and recovery of jejunum from x-ray and adriamycin exposure (a), 205
Effects of single and multifraction radiation; mouse spinal cord (a), 1070
Inadvertent radioiodine therapy in early pregnancy (a), 541
Injury of small intestine, surgical management (a), 364
Late effects of x-irradiation for metropathia haemorrhagica (a), 878
Postirradiation atrophy of bone (a), 366
Radiation, measurement, see dosimetry
Radiation, protective devices
"If you are pregnant or if you think you might be..." (e), 696
New radiation monitor (t), 355
Radiculography, see myelography
Radiobiology, see also dosimetry; neoplasm; radiation, injurious effects; under specific diseases, organs, regions, and radionuclides
Advances in chemical radiosensitization (b), 879
Effects of nitrobenzene derivatives on oxygen utilization and radiation response (a), 877
Effects of single and multifraction radiation; mouse spinal cord (a), 1070
Enhanced tumor cell radiosensitivity in artificial pulmonary metastases of Lewis lung carcinoma (a), 878
Enhancement of radiation response in murine mammary carcinoma by nitrofuran derivatives (a), 205
Radiation response of artificial pulmonary metastases of EMT-6 tumor (a), 878
Sensitization of C3H mouse mammary tumors to fractionated radiation (a), 206
Radiographs, interpretation
Differences between right and left lateral chest, 997
Fundamentals of radiology (b), 545
Interobserver variability in coronary angiography (a), 702
Synopsis of analysis of roentgen signs in general radiology (b), 1073
Value of consultation among radiologists, 807
Radiography, see also specific organs and procedures
Dependence of radiographic mottle on beam quality, 819
Evaluation of speed in 6 film screen combinations (a), 205
Evaluation of xeroradiographic image quality (a), 877
Flash radiography (b), 1073
Image quality in mammography, spectral effects of molybdenum and tungsten target (a), 204
Optimal resources for chest and cardiovascular (a), 361
Panoramic dental radiography (b), 1074
Practical approaches to pediatric radiology (b), 883
Special procedures in chest radiology (b), 884
Standardization of roentgenographic image quality, 659
X-ray technique for facial fractures, 473
Radiography, exposures in diagnostic procedures, see also dosimetry
Mammographic exposures in breast cancer detection centers, 531
Radioimmunoassay
Pancreatic vein in glucagon-secreting carcinoma of pancreas (a), 1064
Radioimmunoassay (b), 544
Radiology, planning
CT and health planning, 187
Economics of CT, 191
Optimal resources for chest and cardiovascular radiography (a), 361
Radiology, practice
CT and neuroradiology, 101
RAPORT radiology system, clinical trials, 811
Technological imperative (e), 356
Value of consulation among radiologists, 807
Radionuclide imaging, apparatus
Comparison of five scintillation cameras (a), 203
Radionuclide, comparative studies
Fluoride and technetium polyphosphate bone scans (a), 541
Radionuclides, therapy, see therapeutic radiology
Radionuclides, treatment
External radiation and radioiodine treatment of thyroid cancers (a), 203
Radiosensitivity, see also radiobiology
Cellular radiosensitivity of human tumors of varying clinical curability, 1027
Ranniger, Klaus (o), 699
Rectum
Radiotherapy in carcinoma, 841
Reflux, see stomach; ureters
Relative biological effectiveness
Of neon ion beam on human kidney cells (a), 206
Renal angiography, see also kidney; renal arteries
Angiography of Wegener's granulomatosis (c), 526
Benign renal oxyphilic adenoma, 717
Collateral circulation to ischemic kidney (a), 874
Renal masses, accuracy of differentiation by neovascularity (a), 874
Transplanted kidneys evaluated by magnification angiography (a), 872
Renal arteries, see also kidney
Collateral circulation to ischemic kidney (a), 874
Renal vein in fibromuscular dysplasia (a), 360
Renal hypertension
Embolic control of, 389
Predicitive value of renal vein renin (a), 700
Renal failure, see kidney
Reporting
Computerized radiological reporting (a), 200
RAPORT radiology system, 811
Respiratory distress syndrome
Centrineurogenic etiology of the respiratory distress syndrome (a), 1064
Respiratory tract, see individual organs
Roentgenograms, see radiographs; radiography

Sacroiliac joint
Sacroiliitis in severe psoriasis, 579
Sarcoidosis
Anterior mediastinal lymphadenopathy in, 983
Sarcoma, see specific tumors
Scintigraphy
Reliability of pulmonary in mediastinal involvement in bronchial carcinoma (a), 1068
Sclerederma
Mixed connective tissue disease and scleroderma-systemic lupus erythematosus overlap (a), 1068
Myocardial lesions of progressive systemic sclerosis (a), 701

Screens, see radiography
Scrotum
Scrotal "arteriocele" from iliac artery occlusion (c), 670
Sella turcica
Evaluation of sphenoid sinus for transsphenoidal surgery (a), 875
Fracture, 969
Transsphenoidal hypophysectomy, 601
Semilunar cartilages, see also knee
Bucket-handle tear of medial meniscus (a), 875
Ossicle of meniscus, 785
Shields, see therapeutic radiology
Sickle cell disease
Tibiotalar slant in sickle cell anemia (a), 366
Sigmoid, see colon
Sinuses, paranasal
Sphenoethmoidal mucocele, 595
Transsphenoidal hypophysectomy, 601
Skeleton, see bone
Skin
Irradiation in prevention of keloids, 509
Skull
Arachnoid granulations simulating osteolytic lesions (c), 523
Epidermoids involving temporal bone (a), 876
Frontometaphyseal dysplasia: evidence for autosomal dominant inheritance, 927
Fracture of sella turcica, 969
Intracranial chondromas, 973
Os incae, 469
Variants and anomalies of obelion, 487
Small bowel, see intestine; gastrointestinal tract
Society for Pediatric Radiology
Program for 1976 meeting, 368
Soft tissues
Evaluation of pathologic alterations of juxtaosseous soft tissue by xeroradiography (a), 1066
Sphenoid sinus, see sinuses, paranasal
Evaluation of for transsphenoidal surgery (a), 875
Spinal cord, see also arachnoid; meninges; myelography
Autonomic dysreflexia in cystourethrography and ileal loopography, 293
Cervical epidural venography (a), 539
Effects of single and multifraction radiation; mouse spinal cord (a), 1070
Hemangioblastoma (a), 1067
Vascularity, extraspinal sources of spinal cord arteries (a), 1070
Spine, see also atlas and axis; sacroiliac joint
Ankylosing spondylitis: comparison of men and women (a), 875
Craniovertebral border anomalies, 281
Discontinuity of spinous process in diagnosis of unstable fractures of the spine (a), 703
Discovertebral traumatic lesions, 457
Limbus vertebra, discography (c), 854
Spinal involvement in diffuse idiopathic skeletal hyperostosis (a), 875
Unilateral dysplasia of axis (c), 525
Spleen, injuries
Echographic evaluation (a), 201
Embolization of spleen for control of hemorrhage and *in situ* splenectomy (a), 1064
Spondylitis, see spine
Staphylococci, see specific organs
Sternum
Absent mesosternum in congenital heart disease, 923
Stomach, see also gastrointestinal tract; peptic ulcer
Accuracy of radiological and endoscopic diagnosis of carcinoma (a), 703
Hemorrhage from gastroesophageal junction (a), 536
Lymphoreticular hyperplasia (pseudolymphoma), 261
Subaortic stenosis, see also heart
Echocardiography in discrete subaortic stenosis (a), 536
Subdural, see meninges
Subtraction, see radiography
Sutures, see skull
Swyer-James (Macleod's) syndrome (a), 359
Syndactyly, see fingers
Synostosis, see skull
Syphilis
Acquired in bones (c), 789
Syringohydromyelia
Meningomyelocele and, radiological aspects (a), 1068

Talus, see ankle
Takayasu's arteritis
Congenital coarctation and, 227
Tarsus, see foot
Teeth
Oral roentgenographic diagnosis, 4th ed. (b), 882
Panoramic dental radiography (b), 1074
Tetralogy of Fallot, see heart, abnormalities
Therapeutic radiology, see also dosimetry; radiations, injurious effects; radiobiology; and names of diseases, organs, and regions
Cancer therapy abstracts (b), 880
Clinical applications of electron beam (b), 1074
CT in radiation therapy planning, 179
Metal tissue interface effect in irradiation of oral cavity (a), 876
New radiation monitor (t), 355
Transformation delay of lymphocytes in radiation therapy, 337
Therapeutic radiology, complications
Effects of radiation therapy on growing long bones, 935
Gastrointestinal tract complications (a), 543
Inadvertent radioiodine therapy in early pregnancy (a), 541
Late effects of x irradiation for metroppathia haemorrhagica (a), 878
Parametrial calcification after radioactive gold treatment of cervical carcinoma, 511
Radiation injury of small intestine, surgical management (a), 364
Subclavian artery occlusion following irradiation of breast carcinoma (a), 203
Thyroid dysfunction, complicating irradiation of head and neck (a), 543
Treatment of radiation necrosis with hyperbaric oxygen (OHP) (a), 1068
Therapeutic radiology, technique
Brachytherapy in oncology, 495
Collimating devices for breast cancer teletherapy, dose to the skin, 653
Half body radiotherapy (a), 877
Metal tissue interface effect in irradiation of oral cavity (a), 876
Thoracic duct
Variation and lymph node visualization (a), 200
Thorax, see also specific organs and regions
Differences between right and left lateral chest radiographs, 997
Thromboembolism, see embolism; thrombosis
Thrombosis
Healing of deep venous, heparin v. streptokinase, 553
Traumatic thenar ischemia, 569
Tibia
Tomography in fractures of tibial plateau (a), 1066
Thyroid
Dysfunction complicating irradiation of head and neck (a), 543
Radioiodine treatment of hyperthyroidism (a), 542
Disease, ultrasonography (a), 200
Ultrasound in enlargement (a), 201
Transposition of great vessels, see heart, abnormalities
Treatment planning, see therapeutic radiology

Trisomy, see Down's syndrome
Truncus arteriosus, see heart, abnormalities
Tuberculosis, see also under organ
Aortitis with mycotic aneurysm (c), 859
Ulcers, see peptic ulcer; and under organ
Ultrasound, see also under organs and regions
Fundamentals of abdominal and pelvic ultrasonography (b), 544
General radiologist and ultrasound (e), 867
M-mode echocardiographic techniques and pattern recognition (b), 545
Ultrasonics in medicine (b), 710
Urachus
Carcinoma (c), 351
Ureter
Asymmetry of normal in females, 723
Deviation by psoas hypertrophy (a), 365
Single ectopic, 941
Urethra
Duplication (a), 365
Retention cysts of Cowper's duct (a), 1066
Urinary tract, see also specific urinary organs
Asymmetry of normal ureters in females, 723
Correlation of renal images on bone scan and intravenous pyelogram, 633
Malposition of colon in left renal agenesis and ectopia (a), 1065
Percutaneous nephropyelostomy for acute pyohydronephrosis (a), 365
Radionuclide studies of genitourinary system (b), 880
Single ectopic ureter, 941
Tumors of kidney, renal pelvis, and ureter (b), 880
Urography
Percutaneous nephropyelostomy for acute pyohydronephrosis (a), 365
Peripelvic extravasation, 373
Uterus, see also pregnancy
Cavities in uterine wall (a), 365
Hematocolpos and renal agenesis, 303
Intrauterine identification of IUD by ultrasound (a), 201
New diagnostic horizons with sonar (a), 705
Oviduct response to glucagon (a), 874
Uterus, neoplasm
Carcinoembryonic antigen in carcinoma of cervix, 829
Estrogen therapy: causal role in endometrial cancer? 897
Gynecologic oncology (b), 879
International histological classification of tumours No. 13: histological typing of female genital tract tumours (b), 881
Postoperative irradiation in stage 1 endometrial carcinoma, 325
Preoperative irradiation in endometrial carcinoma, 319
Staging carcinoma of cervix, value of procedures, 825
Uterine leiomyomas with lung metastases, 441
Vagotomy, see gastrointestinal tract
Valsalva sinus, see aorta
Vascular sling, see pulmonary arteries
Vasopressin
Hemorrhage control in chronic ulcerative colitis (c), 672
Veins, see also angiography; embolism; arteriovenous malformations; portal vein; thrombosis
Azygos continuation of inferior cava (a), 872
Balloon occlusion hepatic venography, 949
Cervical epidural venography (a), 539
Healing of deep venous thrombosis, heparin v. streptokinase, 553
Pulmonary venous varix, 435
Renal vein in renal artery fibromuscular dysplasia (a), 360
Systemic-pulmonary vein communication in caval obstruction, 247
Venae cavae
Azygos continuation of inferior cava (a), 872
Systemic-portal venous shunting causing liver scan "hot spot" in superior vena caval obstruction, 637
Systemic-pulmonary vein communication in caval obstruction, 247
Venacavography, corticosteriods, and surgery in idiopathic retroperitoneal fibrosis (a), 700
Ventricles, see brain; heart
Ventricular septal defect, see heart, abnormalities
Ventriculography, see brain; radiography
Vertebrae, see spine
Vesicoureteral reflux, see ureter
Videodensitometry
Carcinoma of lung (a), 359
Ventricular wall motion (a), 361
Vinyl chloride
Hepatic angiosarcoma in vinyl chloride workers (a), 362
Volvulus, see specific organ

WDHA syndrome, see pancreas
Wegener's granulomatosis
Angiography (c), 526
Williams, A. Justin (o), 535
Wilms' tumor, see kidney
Wolf syndrome, see bone
Wrist
Carpal tunnel syndrome (a), 537

Xeroradiography
Evaluation of pathologic alterations of juxtaosseous soft tissue (a), 1066
Xerotomography of peripheral lung lesions (a), 700
X-rays, see radiology; dosimetry; radiation; radiography; therapeutic radiology; and under diseases, organs, and regions